

# VHF-UHF DIGEST

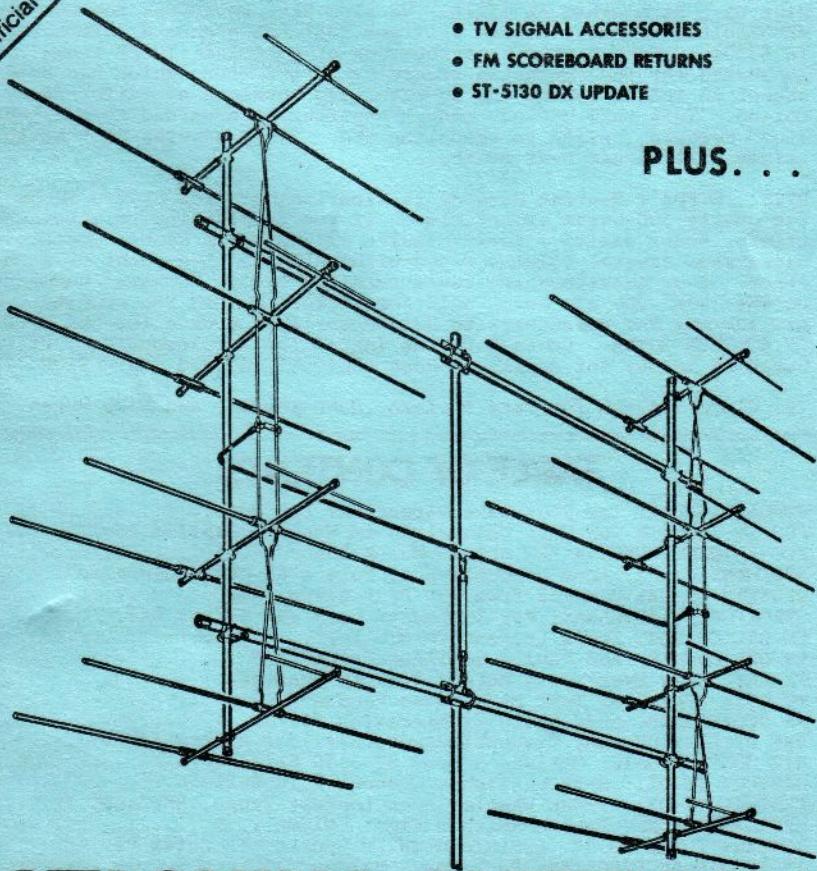
the official publication of the Worldwide TV-FM DX Association

AUGUST 1976

## IN THIS ISSUE:

- TV SIGNAL ACCESSORIES
- FM SCOREBOARD RETURNS
- ST-5130 DX UPDATE

PLUS . . .



**STACKING ANTENNAS**  
AND 67 OTHER INFORMATIVE PAGES!

# **publishers' notes...**

**WTFDA HEADQUARTERS, P.O. BOX 163, DEERFIELD, IL 60015 USA**

**ANOTHER BIG ISSUE...** After our 60-page Bicentennial edition, we have a record-shattering 72 pages of data in this, the August VHF-UHF DIGEST. While we don't intend to continue the trend, we hope that you've enjoyed both issues. Despite this month's expanded TV-FM DX columns, we've met your technical needs with three articles on receivers, antennas and accessories--and that is one trend we do intend to continue! Incidentally, due to the unusually (and unexpectedly) large size of the issue, PHOTO-NEWS and THIS IS YOUR DX do not appear in this month's VUD.

**COLUMN NEWS...** After much searching, we have finally found an editor for SOUTHERN FM-DX. Send all reports to Dave Cox, 2007 E. Brandywine Ct., Birmingham AL 35216...We also have an editor for our new MEMORABILIA column. Robert Williams, 251 6th Avenue E., Twin Falls ID 83301, welcomes your contributions of nostalgic TV-FM items...We apologize for the confusion regarding PS SPECTRUM, which has been absent in recent months due to the heavy workload of editor Terry Colgan. This information, though apparently forwarded to previous staff members, failed to reach the VUD. Terry assures us that the column will return next month.

**BITS...** WTFDA's Reprint Service is flourishing, with orders in hand for nearly 300 pages of articles. If you're planning to obtain reprints, order early!...Early results of the WTFDA Member Questionnaire show several columns rated within tenths-of-a-point of each other. Your questionnaire could turn the tide! Members' comments on the "new" VUD are being held for inclusion with the results...We are looking for volunteers to help compile an update for the WTFDA TV STATION GUIDE. Contact Clarke Ingram (5201 Colewood Dr., Pittsburgh PA 15236) for details...Hope that all enjoyed CONVENTION '76!

73, Clarke Ingram for Pete Oprisko, John Zondlo, and Mike Hogan

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# WTFDA MAILBOX

John Zondlo  
6617 Maryland  
Hammond, IN 46323  
Deadline: 15th

Greetings. Only 2 new members this time around:

Michael A. Sapp                    6925 Weston Road                    Falls Church, VA 22042  
John Winslow                        1106 Shasta Drive                    Madison, WI 53704

Rejoin: John Combs-816 W. Harvard St.-Orlando, FL 32804  
Renew: William Dickerman, Mark Lewis, David Martin, Lowell McCown, Steven Sprachman, Michael Telles.

Address Change: Robert Fischer-Box 80801-Fairbanks, AK 99708  
Mark Lewis - 701-345 Waverly St. - Ottawa, ON K2P 0W4  
Fred Nordquist-7945 Bedford Road-Clay, NY 13041  
Dr. J. Joel Rosenberg-Apt. 909, 40 Godstone Road-  
Willowdale, ON M2J 3C7

A manager under the Golden Arches, MICHAEL SAPP is also a member of NNRC, NASWA, and SPEEDX. His DXing gear includes a JVC AM-FM stereo, an RCA TV, and Sony and GE multi-band portables.

## Tidbits.....

Hope no one else misinterpreted Craig Simons' comments in the last Mailbox. When Craig mentioned the "SW direction", he did not mean shortwave, but rather, southwest. The shortwave direction? Far out.....

Michael D. Schoenfuss (P.O. Box 401, Abbotsford, WI 54405) writes: "I am looking around for places where I can buy the Bearcat 101. I hope to be able to buy one in the near future. I would like information from club members concerning prices of the BC101, and where it can be bought. So far, the lowest price I've found is \$249.00 at Southland Communications, P.O. Box 3591, Baytown, Texas 77520. That information came to me from members Chuck Hermann, Jr., and J.J. Giesielczyk. Also, of interest to members with BC101's, is this ad I found: Bearcat 101: Program 700 channels not in owners manual. Federal Government. Directory \$4.95. Blakeman Electronics, Box 288, Dupont, CO 80024. I am currently trying to sell an old antique radio I have, and would appreciate suggestions on where I can sell it for a reasonable price. It is a Zenith Automatic 10 tube receiver, AC Chassis No. 1005. It has 3 bands: AM and 2 shortwave bands. It has a Wavemagnet and provision for use with a television receiver or phone attachment, for purposes of a sound amplifier. I use it with my scanner to amplify weak signals. The radio has about a 13 inch speaker. It also has 6 different controls for tone: Voice, Normal, Treble, Alto, Bass, and Low Bass. It also has a sensitivity switch, electric tuning indicator, and 6 automatic tuning adjustments which work much like those on a car radio. If anyone out there knows a person or business which would be interested in this radio, drop me a line."

This is from renewing member William Dickerman (YMCA, Box 786, Williamsport, PA 17701): "On June 12, Harry Hayes and I were both receiving FM Es reception of Florida and Georgia at the same time. He discovered that the stations he heard were west of those I heard due to parallax, although he lives east of me. I now have a cassette recorder, so this year for the first time I could record my DX reception, enabling me to send more detailed reception reports, and to put the information in my logbook later at my convenience. My equipment is a Zenith R7000Y-1 Trans-Oceanic, and a Lloyd's 9N21B. The former I use for FM. The latter I use for 108-175 MHZ and public service bands, and for a backup receiver on FM. I haven't counted lately, but I think with the new stations heard on June 12 to 16, I probably have logged close to 120 FM stations to date on the Zenith."

Traveling this summer? What you need is the Radio Guide! The Radio Guide will help you locate a rock or country station in the area in which you're traveling. For a rock or country guide, specify the city you're going to, and send 25¢ to Radioguide-Box 219-Ypsilanti, MI 48197.

See Y'all next month!.....jz



# FCC NEWS AND DATA

Dave Pomeroy  
KTWU--Channel 11  
Signal Hill  
Topeka, Kansas  
66604

August 1976

## TV Applications

Minneapolis, MN (29)	1,000kw	1,193 AAT
El Paso, TX (14)	387	1,982
Houston, TX (20)	166	735.2
Rock Springs, WY (13)	10	57.3

Translators Granted (con't.)		
K10??	S. Junction, OR	KATU
K13??	S. Junction, OR	KOIN
K09MU	Diamond, OR	KIVI
K02ID	Yakutat, AK	was K04IF

## New Stations on the Air

WCFC-38 Chicago, IL  
\*KCPQ-13 Tacoma, WA

## Stations off the Air

\*KPEC-56 Tacoma, WA  
  
Translators off the Air  
\*W73AT-73 Baltimore, MD WMPB-67

## CP's Deleted

\*KMPT Butte, MT

## Call Letters Granted

WCFC	Chicago, IL	was WCFL-TV
WGTQ	Sault Ste. Marie, MI	
WHSV-TV	Harrisonburg, VA	WSVA-TV
WCPT-TV	Crosseville, TN	
KRON	San Francisco, CA	KRON-TV

## Call Letter Applications

*KZSD-TV	Martin, SD	new ch. 8
WHPF	Miami, FL	was WCFB-TV
KTTC	Rochester, MN	KROC-TV
*WNSC-TV	Rock Hill, SC	new ch. 30
WTWH	Syracuse, NY	WHEN-TV
*WVPW	Buckhannon, WV	WWVC

## Translators Granted

K07NX	Camp Lonely, AK	KENI/KTVA
K07NY	Sourdough Pipeline Camp, AK	
K67BB	Ukiah, CA	KHSL
K13OD	Goldfield, NV	KTVN
K12KL	Chiloquin, OR	KOTI
K67BA	Hakalau, HI	was ch. 79 KHET
K06??	Gallup, NM	(100w) KOB-4
K10JU	Atlantic Richfield Camp, AK	
K04IL	Kilvalina, AK	KYUK/KUAC
K05??	Fifteen Mile Valley, CA	KTLA
K08??	Fifteen Mile Valley, CA	KNXT
K10??	Fifteen Mile Valley, CA	KNBC
K12??	Fifteen Mile Valley, CA	KABC
K59AU	Lucerne Valley, CA	KTLA
K66AH	Whitesburg, KY	
K59AV	Salmon, ID	KPAX
K65??	Dryden, NY	WCNY
K59AD	Andrews, NC	WUNE
K07NZ	Midwest, WY	KHSD
K11NH	Winifred, MT	KFBB
K07OA	Winifred, MT	KRTV
K10JW	Werdigre, NE	KMNE
K12KO	Victoria Mines, NV	KSL
K06??	Colstrip, MT	KULR
K12??	Colstrip, MT	KTVQ
K10AT	Highlands, NC	WLOS
K05??	S.Junction, OR	KGW

## FROM THE READERS:

Howard University plans public TV station on channel 32. Tower would be in Bethesda, MD with studios in former WETA-26 facility on campus... programming on 32 would not be from PBS, but mostly produced at Howard "for the DC and/or black audience"... WGSF-31 (Newark, OH) was rumored to go off on June 31...KGBT-4 has switched from CBS to NBC...WPCB-22 and WPFO-40 are both expected to go on the air in Pittsburgh in August...Stockholders in Boise of KBCI-2 have voted to sell to Eugene Television...FCC has approved channel switch for KVFD-21 and KTIN-46 in Ft. Dodge, IA except that KVFD will move to channel 50--Sept. 15 is target date...Broadcast Bureau of FCC has proposed assignment of channel 12 for PTV use in Cheyenne, OK --would be satellite of KETA-13--Also in Oklahoma, KOKH-25 is off the air for the summer...Group in Bend, OR is expected to apply in October for CP for commercial station on channel 21 ...no progress yet in getting KVDO-3 back on the air in Salem, OR...KTPS-62 is still on in Tacoma, WA in wake of activation of KCPQ-13; KPEC-56 went off the air...State of Oregon is in consideration of plan to build series of UHF transmitters in east and central Oregon--may be high power not just translators...Application for 10watt channel 13 in Rock Springs, WY looks interesting--estimated const. cost is only \$24,340--would be owned by three individuals; one chief engineer for WTVI-42 in Charlotte, NC... Kansas State Legislature has vetoed plan to establish statewide system of public television stations--plans are being made for the introduction of new legislation next year...KQTV plans for channel 43 satellite in Topeka, KS are still alive with proposed use of WIBW-13 tower...Closing of channel 73 translator in Baltimore was due to strength of channel 22 signal from Annapolis in downtown Baltimore area--W73AT was set up to reach areas left uncovered by WMPB-67. Thanks to Mark S. Lucas, Frank Aden, Jr. and Clarke Ingram.

# FCC FM NEWS

Bruce F. Elving, Ph.D., Editor  
18 1/2 East 5th Street  
Duluth MN 55805 218-727-6916

## New Stations Granted

AK North Pole 100.3 kg 25000 h,v; 1570', 44 miles primary; 88 mi secondary  
CA Fresno \*89.3 50000 h,v; 500' 33, 73 mi  
CA San Jose \*99.3 10 watts  
CA Walnut Creek KFOG-1 104.5 \$, m, 10 w, on-channel booster of KFOG San Francisco  
CO Breckenridge K221AJ 92.1 \$, r (KKKX 95.7 Denver translator) 1 w, DA, 280'.  
FL Arcadia 98.3 3000 h,v; 195' 12, 40 mi  
IA Sioux City \*90.3 100000 h,v; 920'  
KS Hillsboro \*88.1 10 Schools  
KY Louisville \*90.5 35000 h,v; 580' U/Lou.  
LA Mansfield 92.7 3000 h,v; 300' 15, 46 mi  
ME Presque Isle \*106.1 100000 h,v; 1080', U. of Maine—another pernicious invasion of the commercial part of the FM band by an educational station!  
MD Arnold \*89.9 10 w  
MI Bayne City 93.5 1175 h,v; 455' 24, 74km  
MT Glasgow K280AL 103.9\* km (KCCM 95.7 Scobey MT) 10w, DA, 345'  
NV Battle Mountain \*88.1 Schools (10 w)  
NV Winnemucca K228AF 93.5\$ r (KKBC 97.3 Carson City NV) 1 w, DA, 131 degrees.  
NM Roswell 97.1 25000 h,v; 155' 17, 54 mi  
NY Dix Hills \*88.9 10 w Hollow Hills Lib.  
NY Glens Falls \*91.9 10 w  
NC Charlotte \*90.9 10; NC Fayetteville \*88.1 10 Fayetteville State University  
NC Greensboro \*90.5 10 (WGFS \*90.7 Greensboro deleted?)  
OH Kettering \*88.3 10 [State College  
PA Clarion \*91.7 2300; 320' 15, 45 miles/  
TX Ballinger 103.1 3000 h,v; 300'  
TX College Station \*90.3 3210 h,v; 340'  
TX Ozona 94.3 388 w (h); 300' 8, 32 miles  
WA Omak K252AH 98.3 g (KM81-FM 107.9 Spokane WA) 10 w, DA, 250 degrees  
WV Charleston \*88.5 50000 h,v; 230'  
**On the Air And DX Ready!**  
AL Birmingham WYOK-FM 99.5 100000 h,v; 810'  
AR Warren KWRF-FM 105.5 3000 h,v; 265'  
CA Crescent City KVXJ \*90.1 10  
CA Ignacio KSUT \*91.3 10 (not Ignacio CA, as FCC and Vane Jones say!)  
**New translator granted**  
CC Cortez K288BB 105.5\$, m (KOB-FM 93.3 Albuquerque NM) 10 w, 170' and 280' (DA)  
**On air with Changes (Selected)**  
CA San Diego KYXY 96.5 30000 h,v; 540'  
CA San Mateo KSQI 107.7 6200 h,v; 1160'  
FL Naples WCWU 94.5 96000 h,v; 680'  
IL Peoria WCBU \*89.9 11500 h,v; 260'  
KY Elkhorn City WECL 103.1 100 h,v; 1380'  
KY Owensboro WSIO 96.1 100000 h,v; 340'  
KY Prestonsburg WDOO-FM 95.5 100000h,v; 530'

MA Springfield WTC \*90.7 4000 h,v; 32' MN Collegeville KSJM-FM \*90.1 100000 h,v; 860'  
MN Duluth WAKX-FM 98.9 100000 h,v; 600'  
MN Rochester KROC-FM 106.9 on with v  
MO Buffalo KBFL \*90.3 3900 h,v (245')  
NH Laconia WLH-FM 98.3 3000 h,v; 300'  
OH Akron WGUE-FM 96.5 50000 h,v; 440'  
OH Reading WRCJ \*89.3 330; 125'  
TN Morristown WAZI 95.9 340 h,v; 770'  
WA Olympia KAOS \*89.3 400 w; -14'  
WI Wausau WIFC 95.5 98000 h,v; 1080'  
**Deletion**  
KY Prestonsburg WUKP \*89.1  
**Facilities Changes**  
CA Bakersfield KHIS 96.5 50000 h,v; 500'  
CA Escondido KOWN-FM 92.1 adds vertical  
CA Fresno KFCF \*88.1 390; 1940'; 32, 60mi  
CA San Luis Obispo KCBX \*90.1 3600 h,v; 1410'; 30, 68 miles  
CA South Lake Tahoe KRLT 100.1 -190' (3000 h,v); \$; on air with this change  
CI Waterbury WIOF 104.1 14000 h,v; 840'  
FL Jacksonville WFAN \*91.1 930 h,v; 460'  
FL Naples WNTU from 92.1 to 97.7  
IL Champaign WOVS-FM 97.5 50000 h,v; 360'  
IL Glen Ellyn WDCB \*90.9 300' (5000 h,v) [WDCB shares time with WEPS Elgin IL]  
IA Pella KPLI 103.3 100000 (h); 370'  
IA Sioux Center KDCR \*91.3 has vertical  
KY Bowling Green WLBJ-FM 96.7 3000 h,v; 180' 19, 64 kilometers  
MA Hyannis WCOO 106.1 has vertical  
MA North Adams WJWW from 89.5 to \*91.1  
NJ Litchfield KLFQ-FM 95.3 300' (3000h,v)  
MT Missoula KUFM \*89.1 18400 h,v (2510')  
NJ Atlantic City WAYV 95.1 20000h,v (300')  
NM Albuquerque KRKE-FM 94.1 3500 h,v; 154', but may never operate at this power, as they have applied for more power at 4000+ feet  
NY New York WFUV \*90.7\$ 215' (50000h,v)  
NC Fayetteville WQSM 98.1 500' (99000h,v)  
ND Grand Forks KFJM-FM \*89.3 38000 h,v; 220', 22, 60 mi; talking book SCA  
PA Philadelphia WRCP-FM 104.5 2000 h,v; 1010'; 23, 58 miles  
RI Providence WBRU 95.5 46000 h,v; 420', 30, 70 miles; still presumably using a directional antenna to protect WHRB 95.3 Cambridge MA. [300'  
SC Walterboro WALD-FM 100.9 2650 h,v; / TN Greeneville WOFM 94.9 100000 h,v; 320'  
TX Waco KHQ 99.9 100000 h,v; 427'  
VI White River Junction WNHV-FM 95.3 3000 h,v; 245'; 13, 42 miles  
WA Pasco KOLU \*90.1 3900 (h); -67'  
WA Spokane KXLY-FM 99.9 10,000 h,v; 3010'  
WV Charleston WBES 96.1 (360') 50000h,v  
WI Tomah WTMF-FM 98.9 increases vertical power to 100000 (660', h & v); 64, 135 km  
WY Laramie KUWR from 91.5 to \*91.9 50000 h,v; 1150' 43, 88 miles. KUWR, U of Louisville and many other changes the result of Health, Educ., Welfare grants

under the educational broadcast facilities program. The largest radio grant award went to KSUI \*91.7 Iowa City, whose power increase was approved by the FCC several months ago. KSUI expects to be on with 100 kw by July 1, 1977, and it eventually plans to have a talking book SCA. KSUI will be 1310', 100 kw h, v.

## Dual-City Identifications

CA KVYN 99.3 St. Helena adds Napa CA and changes to 235' (3000 h,v) [OH KY WKKK 100.9 Erlanger adds Cincinnati/ OH WGGN 97.7 Castalia adds Sandusky TN WTCV 102.9 Shelbyville adds Tullahoma TN

TX Midland KMWJ 103.3 adds Odessa TX

## Stereo stations

CO Craig KRAM-FM 93.7  
GA Thomson WHO-FM 101.7, NBC  
IA Cedar Rapids KTOF 104.5 DROPS STEREO  
MI Manistee WRRK 97.7, rock; Y (not E)  
MN Winona KQAL \*89.5, rc; on summers  
OH Galion WLKL 102.3, mr  
OR Ashland KSOR \*90.1, power to 1950 h,v; 1340'  
PA Scranton WGBI-FM 101.3; "Hit Parade"  
TX Gatesville KMCS 98.3, km  
TX Kerrville KPFM 94.3 country  
VT Springfield WCFR-FM 93.5

## SCA (67 KHz) Activities

CA Paso Robles KPRB 92.5 adds SCA  
CA San Francisco KANI 99.7 \* \*  
CA San Mateo KCSM \*91.1 \* \*  
FL Daytona Beach WDNJ 94.5 music  
FL Orlando WDBO-FM 92.3 music  
WDIZ 100.3 heard Sunday night with religion (TM); no on-the-hour identification heard which makes me think it is not a relay of an AM station

FL Tampa WFLA-FM 93.3 adds SCA  
WRBQ 104.7 no SCA heard; remove listing as an SCA station  
GA Macon WCRY-FM 107.9 relay of a National Weather Service station at what sounded like "Hartselle" (AL?); how they'd pick up that 300-watter all the way in Macon I'd never believe!

GA Savannah WTOC-FM 94.1 music  
IL Chicago WNIS 101.1 ethnic, music, T  
MA Fitchburg WFMP 104.5 music  
MA New Bedford WJFD 97.3 music  
MI Adrian WABJ-FM 95.3 adds SCA  
NH Manchester WZID 95.7 no SCA heard  
WGIR-FM 101.1 only used for telemetry and "program relay," but no SCA heard; drop listings as SCA  
NY Lake Success WTFM 103.5 adds SCA  
OH Akron WAUP \*88.1 talking book  
OH Cleveland WLCL 95.5 ethnic (mostly Spanish); WXEN 106.5 talking book for another 7-8 months; then to be supplanted by WKSU \*89.7 Kent OH)[above]  
OH Kent WKSU \*89.7 talking book (see/

PA Philadelphia WRTI \*90.1 adds SCA

IL E. Moline WEMU 101.3 adds SCA

**FCC--FM**

SC Darlington WOAR-FM 105.5 adds SCA  
TX Lufkin - KLUF-FM 105.1 " "

**Formats/Networks**

AK Anchorage KKLV 103.9 r (from m)  
CA Gilroy KFAT 94.5 k (from p-rock)  
CA Ventura KBBY 95.1 NBC (from Mutual)  
FL Crystal River WRYO 98.5 UPI Audio  
FL Daytona Beach WQXO 101.9 r (from m)  
FL Melbourne WYRL 102.3 Mutual Progressive  
News at :55 (M), \$, k  
FL Orlando WHOO-FM 96.5 NBC (from ABC-FM)  
FL Jacksonville WJAX-FM 95.12 Heard with  
ABC Contemporary-if it was WJAX-FM (?)  
GA Savannah WJCL-FM 96.5 ABC-FM  
GA Waycross WACL-FM 103.3 mr  
IL Moline WHIT 96.9 AP Audio (from ABC-FM)  
IL Peoria WWCT 105.7 m (from r)  
IA Dubuque KIWI 105.3 i  
IA Webster City KQWC-FM 95.9 mk (from mr);  
country music at night  
MA Orleans WVLC-FM 104.7 mc  
MS Bay Springs WXYI 93.5 rs

**WTIG, KGIV Flounder; WYEP Reformed?**

NH Plymouth WPNH-FM 100.1 mk; NJ Ocean  
City WSLI-FM 106.3 NBC. OH Cleveland  
WCSB \*89.3 p-rock, monophonic  
PA Altoona WFBO-FM 98.1 m (from rock)  
PA Lehman WPSI \*89.3 rock  
PA Pittsburgh WPIT-FM 101.5 g (r-type  
gospel songs); from gs  
PA Williamsport WLIC \*91.7 p-rock  
SC Beaufort WBEU-FM 98.7 k (from mp)  
SD Sioux Falls KIQV 104.7 NBC (from I)  
WV Morgantown WCLG-FM 100.1 r (from m)  
WA WAJR-FM 101.9 r (from m)

**Call Letters Assigned**

AL Troy \*90.1 WTSU  
AZ Flagstaff 92.9 KFLG (from KAFF-FM)  
AR Fort Smith 100.9 KXXI  
CA Atascadero 104.5 KIQO  
CA San Francisco 96.5 KOLT (from KRON-FM;  
format change from mc?)  
CT New Britain 100.5 WRCH-FM\* (not WRCQ  
as reported elsewhere; m, not r) music SCA  
DE Seaford 98.3 WSUX-FM\* (from WSLX-FM;  
AM now has different call letters)  
(from ); WSPN 95.9 assumed to be Y now)

**August, 1976**

FL St. Petersburg 99.5 WQYK-FM\* (from  
WQYK-FM; AM now has different calls)  
IA Clarinda 106.3 KSWI  
LA Shreveport 100.1 KCOZ  
MO Cabool 106.3 KVVC-FM\*  
MO Mountain Grove 92.7 KLRS-FM  
MT Billings \*88.9 KRE  
NE Seward 96.9 KSRD  
NH Mt. Washington 94.9 WHOM (WMTQ)  
NY Hyde Park 97.7 WHVS (WHVW-FM)  
NC Cullowhee \*91.7 WWCU  
NC New Bern 101.9 WOBU  
OH West Chester \*89.9 WLHS  
OR Klamath Falls 92.5 KJSN (KLAD-FM)  
TN Camden 98.3 WRJB  
TX Arlington 94.9 KWJS (KANC) adds SCA  
TX Palestine 98.3 KHIM  
TX Sonora 92.1 KVRM-FM\*  
UT Beaver 107.1 K296AP (erroneously  
given before as K296AB)  
VA Appomattox 107.1 WTTX-FM  
VA Suffolk 92.9 WFDC-FM (WFQG)  
WI LaCrosse 93.3 WIZM-FM (WHLA)"Z-93", N  
(from ); WSPN 95.9 assumed to be Y now)

**READERS' COMMENTS AND FM INDUSTRY NEWS**

A Florida reporter heard a previously unlisted station in Panama on 90.9, carrying Bank of Panama ads and identified as "Radio Panama." A second station on 90.7 carried songs in English and Spanish, with identifications as "Q-12." Same antenna bearing; suspected to be in Canal Zone. Reception believed to be tropo ducting, with no Cuba, Mexico, or other Central Americans heard; however, at about the same time RJR 90.5 in Jamaica was heard by another Florida FM DX listener.

WJRZ 100.1 Ship Bottom NJ heard testing; regular broadcasting began July 4. In Wisconsin, there's a rumor that WKAU 104.9 Kaukauna, but with studios in Appleton, is planning 50 kw and a move to 104.3. WLST 95.1 Marinette WI has billboards announcing their soon coming on the air.

WGTB \*90.1 Washington DC back on the air fulltime with new manager, same format. WRHY 92.7 Starview PA now 24 hours. It's mostly automated progressive rock. DJs do exist, but "seem to have been ordered to talk less and play more music." WHOM Mt. Washington (formerly WMTQ) 94.9 stands for "We're High On Mt. Washington", having made the change so there's less confusion with WMTW(TV). WEZV 95.1 Bethlehem PA, although now rock, still calls self "EZ."

In Oregon, the AM sister of KPAM 97.1 Portland is KSLC, but they have applied for K PAM call letters, so KPAM will become KPAM-FM. Flash! KQIV 106.7 Lake Oswego OR left the air June 26, reportedly because of not paying off its debtors. WLHI \*86.3 Ft. Wayne IN hopes to be on this fall (10 watts).

WTBI 105.7 McComb MS, which was supposed to be on the air by now, and is not yet on the air, has had problems and they do not seem to be transmitter problems. Through various hear-say sources it was learned that the owner defaulted on debts and skipped town. "A foundation which lent him \$70,000 wants it back; the deejays of this soul station walked out after no pay. . . and it is said that interested parties want the FCC to cancel the license." I have tried to call WTBI at 601-684-9852 but without success. A two-page list of all Gulf coast cp's and new FM's on the air in the past year is available for 10¢ and a self-addressed stamped envelope from Mike Dorner, 1409 Hymelia Ave., Metairie LA 70003. WVSS\*90.7 Menomonie WI now 1050; 14'; poorly received in Bloomington MN; asking for requests and complaining of few requests received "What do they expect—new station and weak?" Trans-Rockies reception is reported by a person in Greeley CO who gets KRAI 93.7 Craig CO, 140 miles west, with Breckenridge 102.3 and Vail 104.7 also heard. KRAI comes in with stereo.

From Ohio, it's learned through local sources that WCUE-FM 96.5 Akron plans to become WKDD and to call itself "KD-96" with live album rock. Will add stereo. WPST 97.5 Trenton NJ basically rock now, but on Sundays at least they have five hours' of classical music. WNWS 97.1 New York silent starting 2 am Sundays (Monday morning?). WWOC 94.3 Avalon NJ seems not to use its call letters, calls self "stereo 94." WBJH 101.5 Trenton erratically carries WBUD1260 (AM); Back on air: WYEP\*91.5 Pittsburgh; reforms promised, although a check from them for an FM Atlas bounced. A wealth of Canada FM news received; over 2-pp worth. It is being printed and will be included with the early orders for the FM Atlas while the supplies last. The FM Atlas now should finally be in the hands of all who ordered from the May ad. Contributors to be listed next month.

# NORTHERN FM-DX

Fred Nordquist  
7945 Baxford Road  
Clay, NY 13041  
Deadline: 10th of mo.

August 1976

June turned out to be a very good month for most reporters, with many Es openings noted; even double-hop Es to Puerto Rico on 6/27! Es was noted on the following days in June: 3,4,6-9,11-13,15,16,18,21,24,25,26-28. June 16,27 & 28 were the best, with the 27th taking the honors.

John Ebeling - 9209 Vincent Ave. So. - Bloomington, MN 55431 (CST)

6/4 Es 1058 WFSU	91.5 Tallahassee, FL jazz	6/18Es 1800 WDEA	95.7 Ellsworth, ME
1109 WQMA	94.9 " K	1806 WRKD	93.5 Rockland, ME
1115 WTUN	100.1 Selma, AL (+SCA)	1823 WIXA	98.9 Brunswick, ME ("KIA")
1117 WMEZ	94.1 Pensacola, FL	1836 WRUM	96.3 Rumford, ME R
1124 WTVY	95.5 Dothan, AL K	1850 WGBH	99.7 Boston, MA Cl
1126 WELX	92.9 Mobile, AL R	1858 WICN	90.5 Worcester, MA
1130 WQSR	102.5 Sarasota, FL	1900 WOCC	94.9 West Yarmouth, MA
1130 WPMI	98.9 Montgomery, AL Talk	6/21Tr 2120 WVSS	90.7 Mequonie, WI R
1145 WQJM	97.9 Clearwater, FL MoR	6/26Es 1953 KMBS	96.1 Harlington, TX
1834 WMCU	89.7 Miami, FL G	2003+UNID	93.9 CBS NX/Mystery Theater
1843 WLHL	92.3 Montgomery, AL R+SCA	2017 KEPO	94.1 Beaumont, TX (+SCA)
1845 WMEZ	94.1 Pensacola, FL MoR	2030 KPOE	94.1 Humble City, NM MoR
1847 WMPM	99.1 Pascagoula, MS MoR	2040 KINT	97.5 El Paso, TX R
1855 WIRB	96.9 Enterprise, AL	1052 WVFH	94.1 Lakeland, FL
1900 WLPR	96.1 Mobile, AL (+SCA)	1102 WLCY	94.9 St. Pete., FL R
1913 WMFM	93.9 Moultrie, GA ads	1800 WJCT	89.9 Jacksonville, FL Cl
1917 WBHU	95.7 New Orleans, LA	1820 WEDU	99.1 Miami, FL R
1921 WJKO	98.5 " " R	1840 WWED	92.7 Bamberg, SC
1937 KURF	88.7 Houston, TX new fr.	1900 WMPR	88.1 Sumpter, SC
1940 WCKW	92.3 Laplace, LA (+SCA)	1902 WXTG	96.9 Charleston, SC
1940 WJNO	89.9 New Orleans, LA cl	1905 WPMR	107.5 St. George, SC G
1948 KZZQ	94.3 Golden Meadows, LA R	1916 WDUV	103.3 Brandenton, FL
6/9 Es 2100 WEKP	91.5 Gadsden, AL s/off	1920 WIRH	97.7 Georgetown, SC
2109 WRAS	88.5 Atlanta, GA R	1956 WJAX	95.1 Jacksonville, FL Talk
6/11Tr 2005 KLIN	107.3 Poteau, OK K	2000 WMMT	93.9 Moultrie, GA K(+SCA)
6/18Es 1744 WPBC	92.9 Bangor, ME	2004 WTVY	95.5 Dothan, AL K
1750 WELM	107.5 Lewiston, ME R	2015 WAVY	100.7 Tampa, FL MoR(+SCA)
1755 CJFM	95.9 Montreal, QU R	2027 WORJ	107.7 Mt. Dora, FL R
6/28Es 2121 WSPA	98.9 Spartanburg, SC	2027 WELE	105.9 Deland, FL Y
2125 WITC	96.9 Charleston, SC MoR	2345 WEZZ	97.7 Clanton, AL MoR(not KG)
2130 WTC	94.1 Savannah, GA	2348 WENN	107.7 Birmingham, AL R
2138 WSGF	95.5 " R	2357 WOOF	99.7 Dothan, AL Cl
2140 WITZ	96.1 Jacksonville, FL MoR	2359 WIRB	96.9 Enterprise, AL R
2145 WCRS	96.7 Greenwood, SC	6/28Es 1101 WXXI	91.5 Rochester, NY Cl
2150 WANS	107.3 Anderson, SC	1101 WNTQ	93.1 Syracuse, NY MoR(+SCA)
2152 WJCL	96.5 Savannah, GA MoR	2028 WTEW	92.1 Manning, SC K
2200 WBEU	98.7 Beau fort, SC R	2033 WPXI	95.1 Charleston, SC "Soul 95"
2200+Unid	92.1&105.9 Braves BB who?	2100 WMTB	92.1 Myrtle Beach, SC MoR/SCA
2223 WFSU	91.5 Tallahassee, FL	2103 WGMB	97.7 Georgetown, SC R
2228 WMYQ	96.3 Miami, FL R	2112 WACG	90.7 Augusta, GA
2237 WNDA	95.1 Huntsville, AL G	2114 WKRJ	93.5 Columbia, SC MoR
2241 WTVY	95.5 Dothan, AL	2115 WJCL	96.5 Savannah, GA MoR
2255 KASU	91.9 Jonesboro, AR	2119 WMHK	89.7 Columbia, SC ET

New Stations underlined.

Michael Hogan - 4811 Euclid Ave. - East Chicago, IN 46312

6/20 Tr2200 WDOW 97.9 Dowagiac, MI (85 mi) Log now at: 4 states, 45 stations,  
2100 WSND 89.9 Notre Dame, IN (60) including 10 on the educational band, 73.

Rod O'Connor - P.O. Box 72 - SW Harbor, ME 04679 (EDT)

6/16Es 1741 WBGY	93.9 Tullahoma, TN(1125)	6/16Es 1825 WPTH	95.1 Ft. Wayne, IN (900)
1743 WDOR	93.9 Sturgeon Bay, WI(960)	1827 WNUW	99.1 Milwaukee, WI (950)
1745 WROE	94.3 Neenah, WI (975)	1835 WNNW	103.3 Wisc.Rapids, WI(1100)
1748 WALT	97.1 Meridian, MS (1100)	1845 WIAL	94.1 Eau Claire, WI(1160)
1750 UNID	96.9 WMDR? "Stereo 97" (1300)	1850 WEEC	100.7 Springfield, OH(850)
1755 KOMZ	100.3 Alton, IL (1280)		1st good opening of season, but none since.

August 1976

Andy Bolin - 709 Lincoln Ave - Charleston, IL 61920

On 6/27 I finally got my 1st double hop Es....Puerto Rico. Plus 500 mile SC went to top of the band for the 1st time! The only trouble w/having 2Es to P.R. is that every map measures the mileage different. The only conclusion I've come up with is that it's between 1730 & 2070 miles. Other than that, most newies this year are new stations on the air.

6/3 Es 1315 to 1430 S. FL MUF 108	6/21 Es 1445 to 1730 S. TX MUF Top
Es 1315 WGLY 98.3 FL Goulds \$G	1720 to 1750 most Monterrey NL
6/4 Es 1300 S. FL, LA 1315 TX MN AZ MUF top	6/24 Es 1030 to 1050 S. TX MUF KBFM
1318 KMWJ 103.3 TX Midland MoR \$	1600 to 1615 KBYU KUER UT
1400 KACV 89.9 TX Amarillo \$	6/26 Tr 0000 Pittsburgh
1515 to 1555 KUNM KTDB KOB all NM	0930 KEOR 102.7 NE Lincoln o/WPPR \$ EL
6/6 Es 1915 to 2000 NM MUF 100	1030 KGEL 100.7 NE Omaha o/WVTS \$G
6/7 Es 1125 to 1145 S. FL MUF WMJX	Es 1145 to 1430 S. FL strong MUF WSHE
1315 to 1500 all CO MUF top	2130 KCTB 93.9 AZ Flagstaff (1310) \$G
1445 KIBI? 93.5 NE Ogallala \$rr	2145 ZEM & S, TX till 2205
1539 KOYE 94.9 TX Laredo \$	6/27 Es 1145 to 1430 mac t FL
1559 KENK 99.3 Tams Nuevo Laredo \$	1300 WKZM 105.5 FL Sarasota (890) G
1800 KSHH 94.9 ID Pocatello \$	1329 WRCC 103.9 FL Cape Coral \$M
1820 KDLY 97.5 WY Lander \$rr	2 Es 1359 to 1433 WMDD 96.5 P.R. Fajardo
2043 KHOM 104.1 LA Houma \$	1401 WEVA 94.7 P.R. Bayamon
2045 KELL 107.1 LA " \$rr	Es 1430 WMPR 88.1 SC Sumpter \$ NPR (575)
2100 KEMM 95.1 TX Victoria \$ EL	1445 WRNS 95.1 NC Kinston \$K (645)
2115 KIPC 91.5 NM Albuq. \$rr	1500 WGH 97.3 VA Newport NX \$ CL
2130 KPAS 93.9 TX El Paso \$G	1503 WCMG 100.3 VA Norfolk \$K AM-PM ID
6/8 Es 2130 KACV 99.9 TX Amarillo \$	1528 WKSS 95.7 CT Hartford, \$
6/12 Tr 0000 Strong w/KOPM KAFG KPNB KXXY OK	1530 WPEL 96.5 PA Montrose (660) ID
Es 1045 to 1115 KANW KUNM KIPC KOB NM	1531 WMEA 90.1 ME Portland \$ WMEA-WMEH
6/15 Tr 0000 to 0100 KLYX TX also KILT(785)	1815 WFUG 92.9 VA Suffolk \$ EL (665)
Es 1230 KBOW 94.1 MT Butte	1817 WOJI 102.9 VA Norfolk \$ "WOW-E"
6/16 Es 1615 to 1640 Miami MUF WAIA	1830 WSHA 88.9 NC Raleigh (585)
1710 WQDY 92.7 ME Calais \$	1830 WPAJ 107.1 SC Lancaster \$ (525)
1715 KPRC 92.9 ME Bangor \$EL	1830 WNOK 104.7 SC Columbia \$ rr (555)
1722 WNEH 104.3 ME Gardner \$rr	1833 WGUS 102.3 GA Augusta "102 G" \$ EL
1726 WMEG 100.1 ME Houlton \$rr/CBS	1843 WEZQ 101.7 SC Myrtle Beach \$ rr/soul
1803 WUHB 91.3 NH Durham \$ jazz	1845 WCIG 107.1 SC Mullins \$ rr (600)
1817 WLNH 98.3 NH Laconia \$ rr	1847 WDIX 106.7 SC Orangeburg
1828 WROW 100.9 ME Westbrook"Reeken"	1858 WCMJ 99.3 SC Chester (520)
also WTOM. ZEM til 1900.	1859 WAGG 90.7 GA Augusta \$ (535)
2015 strong from Salt Lake City	1912 WLGM 95.9 SC Aiken rr (550)
6/18 Es 1800 to 1930 strong from ME, Quebec.	1941 WKSM 104.9 NC Tabor City (660)
6/28 Es 0925 New Orleans (670) to 101.1 MUF	2000 WKKY 100.9 NC Fairmont K
1730 KCFR 90.1 CO Denver	2102 KAMA 93.1 TX El Paso \$ w/ss(1140)
2245 WMPR WSCI WPXI all SC	& 2132 KSCH 95.7 NM Hobbs \$ K
2345 to 0010 WPQX MT Havre 92.5 ----- 73's.	Underlined new to log.

Roger Gravelle - 60 Valerie St- St. Thomas, ONT N5R1A8 (EDT)

Report covers 6/1 to 6/28. Log totals: approx. 290. Eq: Philco Ford AM/FM MPX & Spike Ant. I dream of my old 10 elem. yagi...no room for it unless I crossmount ...tower would probably go down. Es was best opening since last yr. about the same time, but 1 wk later. Didn't notice it until my station I was listening to disappeared and my AFC locked in a skip station close by. Now to report:

6/18 Tr 0200 WLRO 95.3 MI Whitehall(280)	6/27 Es 2024 WNOC 101.1 LA New Orleans (1100)
WWSE 93.3 NY Jamestown(100)	2025 WJNS 92.1 MS Yazoo City (1000)
6/27 Es 1930 WPAP 92.5 FL Panama City(1080)	2026 KJMD 92.5 TX Pasadena (2280)
1940 WCKS 101.1 FL Cocoa Beach (1200)	2026 WCKW 92.3 LA Laplace (1080)
1945 WEAT 104.5 FL Palm Beach (1480)	2028 KREE 106.1 LA Monroe (1050)
2000 WMCU 89.7 FL Miami (1500)	2045 WORJ 107.7 FL Mt. Dora (1180)
2038 WBWJ 105.1 FL Orlando (1350)	2050 WIRK 107.7 FL W. Palm Beach (1450)
2000 WWBA 107.3 FL St. Pete. (1100)	2059 WIGL 107.9 FL Miami (1500)
2011 WJNO 97.9 FL Palm Beach (1450)	2138 WELE 105.9 FL Deland
2011 WAPE 98.1 LA Baton Rouge (1100)	2230 KPEL 99.9 LA Lafayette (1080)
2019 WREQ 104.7 FL Tampa (1100)	2230 WBIZ 100.7 WI Eau Claire

Underlined new to log.

Last two received on portable Sony.

August 1976

Northern FM DX

Joseph Smith, Jr., 196 Ackley Avenue, Johnson City, New York 13790/Times are GMT

EQT: McIntosh MR 78, Chanel Master 4408 646 (-492HAAT)  
75ohm lead-in, U-100 rotor. (no Traps or Boosters)

NOTE list only new FM Stations for June 1976

6/02TR	1916	WDBA	107.3	cw	PA	6/28Es	0001	WEZB	97.1	ID	LA	1080m
	2300	WGMR	100.1	ID	PA		0002	WLIN	95.5	ID	MB	1020m
	2314	WEZV	95.1	ID	PA		0005	WKSJ	94.9	ID	AL	1030m
607	2100	WYII	95.9	ID	PA		0011	WFPR	107.1	Z	LA	
	2307	CFCA	105.3	ID	ON		0023	KSMB	94.5	ID	LA	
	2318	CKBY	105.3	ID	ON		0042	WBOS	92.9	ID	MA	
6/08	0138	WINE	95.1	ID	CT		0043	WFMI	98.9	ID	AL	
6/09	2100	WDAS	105.3	ID	PA		0044	KREB	106.1	ID	LA	
	0127	WEZR	106.5	ID	VA		0044	WCGQ	107.3	ID	GA	
6/11	1500	WKLP	94.1	ID	WV		0048	WVRF	99.9	ID	WV	
6/13	0204	WVIN	98.3	ID	NY		0059	WBLX	92.9	ID	AL	
	0250	CKTB	97.7	ID	ON		0102	WQID	93.7	ID	MS	1065m
	0304	CBO	103.3	ID	ON		0111	KSNS	96.1	ID	LA	
6/14	2240	WFRB	105.3	ID	MA		0113	WMTM	93.9	ID	GA	
6/15	0244	WHYN	93.1	ID	MA		0115	WBOB	96.1	ID	FL	1015m
6/16	0240	WJMD	94.7	ID	MA		0129	WMAR	95.9	ID	LA	
6/17	2238	WQYK	99.5	ID	FL		0136	WNOC	101.1	ID	LA	1080m
6/20	1730	WMAL	107.3	ID	DC		0137	WDAL	101.3	ID	MS	
	1747	WMOD	98.7	ID	DC		0139	WFMF	102.5	ID	LA	
6/21	0301	WPJB	105.1	ID	RI		0146	WYNK	101.5	ID	LA	
	0303	WLKW	101.5	ID	RI		0200	KETR	88.9	ID	TX	1245m
6/22	0257	WBjh	101.5	ID	NJ		0200	KSUC	88.3	ID	TX	1335m
6/24	0400	WXRL	103.1	ID	PA		0205	WRPM	107.9	ID	MS	
	0543	WBAB	102.3	ID	NY		0208	KSMI	104.9	ID	LA	1040m
6/26	1800	WNUF	100.7	ID	PA		0208	WWL	101.9	ID	LA	
	2258	WRTI	90.1	ID	PA		0215	WBYU	95.7	ID	LA	
6/27ES	2341	WMEZ	94.1	ID	FL		0230	WCKW	92.3	ID	LA	1045m
	2344	KTRM	95.1	ID	TX	6/30Tr	0111	WCVM	100.9	ID	VA	
	2359	WABB	97.5	ID	AL							

As of July 01st receive 335 stations and 110 stations in New York State  
the 6/28 logging of KSUC is most distant DX to date. GUD DX to all--JSJ

Harry J. Hayes, Star Route, Box 226c, Gouldsboro, PA. 18424 (EDT.)

Eq. Zenith Trans-Oceanic w/whip, Masterwork stereo w/rabbit ears.

I was ready to call the 1976 Es season a flop until the super almost non-stop openings of 6/27 and 6/28. Es were somewhat weak into the morning hours of 6/27 into the Florida area but grew extremely strong in the evening hours. Florida was in again on the morning of 6/28 as early as 0940 when WMGU 90.9 was in. In the evening we tried to get Monday Night Baseball on WFVI-6. But the channel was so jammed up w/bs that it was impossible. I said to heck w/baseball and got busy on the FM RX. No report in May due to virtually no DX.

5/7 AP 1300 CJBT-91.1 Toronto On. Ending classical program, full ID.(260 mi.)

5/27 AP 1712 WERB-92.5 Rochester NY. W/NNIS.(180)N

5/31 Tr 0315 WKFM-104.7 Fulton NY. "We are Music 'KFM'".(155)N

6/8 Tr 0130 WOUR-96.9 Utica NY. Fair w/rr.(120)N

6/10 Tr 2356 WPGC-95.5 Morningside Md.(180)R

6/11 Tr 0125 WGMS-103.5 Washington D.C. W/classical.(180)N

0126 WFSL-107.9 Annapolis MD. W/religion.(180)R

0205 WMAL-107.3 Washington. Fair sig.(180)R

6/12 Es 1252 UnID-94.9 w/c/w. Suspect WOMA.

1255 WJAD-97.3 Bainbridge Ga. Mut. NX, RR.(850)R

1300 WGFC-104.5 Albany Ga. Full ID.(805)N

1315 WMAZ-99.1 Macon Ga. "FM 99 Macon", Hit Parade type format.(725)N

6/16 Es 1705-1727 CBC-106.9 St. Johns NFLD. CB6 Eng. net. relay station, CJON-6

audio in on 87.75 at same time.(1200)N

1830 WQID-93.7 Biloxi Ms. W/RR.(1040)R

1835 WQUE-93.3 New Orleans La. "Q-93" Tent.

1845 WPMO-99.1 Pascagoula Ms. "The Velvet Sound of WPMO", EL MX.(1030)N

1855 WAFL-94.5 Birmingham Al. W/ Hit Parade. Tent., WHRC-TV audio in.

1900 UnID-91.5 W/ discussion on Chile.

2010 WIRB-96.9 Enterprise Al. W/oldies.(895)R

(Harry J. Hayes report-continued next page.)

August 1976

- 6/18 Es 2043 CKPR-94.3 Thunder Bay On. w/EL, tent.  
6/19 Tr 1035 WKYS-93.9 Washington D.C. "93 KYS", RR MX.(180)R  
1101 WMBR-106.5 Baltimore MD. Ending NX by woman, "FM-106".(140)N  
1105 WFIS-93.3 Fredericksburg Va. Ending NX.(220)N  
1200 WDJQ-104.3 Baltimore MD. "Super-Q 104", very weak.(140)R  
6/27 Es 1130 WAIQ-97.3 Miami Fl. "WA-one-A"(1090)R  
1139 WAXY-105.9 Ft. Lauderdale Fl. Plays all oldies, RR. "WAXY, FM-106"  
(1070)N  
1158 WSHE-103.5 Ft. Lauderdale Fl. Progressive RR.(1070)N  
1302 WMYQ-96.3 Miami Fl. Announcer talking to someone picking up station  
in Charleston WV.(1090)N  
1408 WMYQ-96.9 This time announcer talking to someone named Snyder in  
Scranton PA. who was picking up the station. Only ID  
hrd. was 96-X. What are the new calls for this? (WMJK)  
1409 WINZ-94.9 Miami Fl. w/RR.(1080)R  
1409 WBUS-93.9 Miami Beach Fl. w/Jazz MX.(1080)N  
1450 KRLY-93.7 Houston TX. w/RR.(1350)R  
1504 KYKR-93.3 Port Arthur TX. "Kicker Country"(1300)N  
1510 KILT-100.3 Houston Tx. MX for Houston, tent.  
1513 WXEL-105.3 Slidell La. w/ heavy soul, tent.  
1528 KROK-94.5 Shreveport La. "K-Rock"(1130)R  
1530 KOAX-105.3 Dallas TX. EL MX.(1280)R  
1534 KWEH-97.1 Camden Ar. Strong.(1060)N  
1553 WKYQ-93.3 Paducah Ky. ID, very folksy sounding c/w format.(740)N  
1559 KISR-93.7 Fort Smith Ar. Woman DJ.(1090)R  
6/27 Es 1600 KMAG-99.1 Fort Smith Ar.(1090)N  
1607 KSYN-92.5 Joplin Mo. Ad for place in Pittsburg, Ks.(1040)R  
1615 UnID-96.9 w/classical choir MX. KMRJ?  
1625 UnID-92.1 w/gospel MX, thru local WMJW-92.1  
1635 UnID-94.9 w/EL MX. KCEZ? 1640 UnID 91.5, Opera.  
1645 UnID-90.5 w/Symphony selections.KXCV?  
1648 WKSJ-94.9 Mobile Al. W/c/w.(1000)R  
1854 KWEH-97.1 Camden Ar. Very potent sig.(1060)R  
1900 KADL-94.9 Pine Bluff Ar.(1000)N  
1903 KFBC-93.5 Forrest City Ar. Feature;"Consi's Carrousel".(920)N  
1910 KFMV-107.9 Magnolia Ar.(1110)R  
1924 KTRM- 95.1 Beaumont TX. W/KTRM Perspective, strong thru semi-local WEZV.  
(1300)N  
1929 KWIC-107.7 Beaumont TX. W/RR. "Quick FM".(1300)N  
1939 Two 104.5 UnID's mixing it up w/RR and EL MX.  
1946 KSNS-96.1 Lake Charles La. w/SID, completely dom. o/semi-local WLEV. N  
1950 KYKX-105.7 Longview TX. Hrd. "Kicks" ID here. Tent.  
1954 WFMP-102.5 Baton Rouge La. Excellent w/RR.(1110)N  
2014 WJUB-93.3 New Orleans La. w/RD.(1110)N  
2036 UnID-104.5 w/soul MX. 2037 Tent. KNOK-107.7 w/soul requests for Dallas.  
2045 KTLC-100.3 Dallas TX. IN w/EL MX.(1280)R  
2047 KNUS-98.7 Dallas TX. W/RR and Coca-Cola ad w/mention of Dallas, tough  
thru WBRE-98.5 sideband QRM. Tentative reception.  
2105 KCHU-90.9 Dallas TX. w/station pledges. Announcer talking about being  
recieved in N.J. and Pa. and asking for money from  
"skip" listeners!(1280)N  
2115 UnID 101.7 w/"Powerline", a teenagers religious program. Does anybody  
know if KDIA De Ridder, La. carries this at this time.  
2122 WRNO-99.5 New Orleans LA. W/RR(1110)R  
2129 WSWG-99.1 Greenwood Ms.(930)R.  
2140 WAFB-98.1 Baton Rouge La. W/RR, Hit Parade type format. Tough thru  
sideband of superstrong WVCD-97.9 Hazelton.(1110)N  
2143 KSMB-94.5 Lafayette La. Finally logged this one instead of the usual  
KROK. Has RR also.(1185)N  
2153 WYNK-101.5 Baton Rouge La.(1110)R.  
2201 WDMS-100.7 Greenville Ms.(1000)N. 2201 WJXY-100.7 La. mixing w/WDMS.  
2224 KWXI-97.1 Ft. Worth TX. A tentative on this one.  
6/28 Es 1048 WMYQ-96.3 Miami Fl. In again w/96-X IDs.(1090)R  
1130 WMCU-89.7 Miami Fl. An ID finally picked up at this time from this gos-  
pel station. "S. Florida's Good NX Radio, WMCU". This  
station was in since at least 0940; tune in.(1090)N

(Harry J. Hayes report-concluded next page)

August 1976

- 1625 KVPI-93.5 Ville Platte La. Call tentatively hrd. during Es w/rapidly fluctuating MUF. Also UnID 93.5 w/Ment. of S. Miss.  
 2115 Tune in, extremely intense Es in from several different directions.  
 2120 WFLA-93.3 Tampa Fl.(1010)R. 2125 WBWJW-105.1 Orlando, "BJ-105".(940)R  
 2130 WEAT-104.5 W. Palm B. Fl. ID hrd. while on 104.7 looking for needed WRBQ.(1000)N  
 2134 WAMR-92.1 Venice Fl. ID, very strong sig. really smashing local WMJW. N  
 2139 WDIZ-100.3 Orlando Fl. ID and SID.(940)N (1000)  
 2205 WFBC-93.7 Greenville SC. Just pretty clear ID and RR format on tape but feel a little reluctant to count since so far off base.  
 2208 WJID-93.3 La.(1110)R. 2221 WMYQ-96.3(1080)R.  
 2223 UnID-107.9 w/c/w. WIRK?  
 2315 WBAD-94.3 Leland La. W/disco and soul. ID tentatively heard.  
 2347 KKNG-92.5 Oklahoma City OK. "King, \$-92".

Its somewhat unusual to hear FM Es this late. Today 6/29 no Es hrd. so far, which is OK since I'm tired out from the last two days, hi. Total now 342 heard.

Joseph Fela - 150 Robert Place - So. Plainfield, NJ 07080 (ELT) (New underlined)

RX- Pioneer SX-828. ANT-JFD-FM-10A w/rotor at 35°.

4/17 Tr 1000 WXCI-91.7 Danbury, ct. w/rock, mentions Western CT state college.

4/23 Tr 0105 WIHS-104.9 Middletown, CT ended w/NX religious

5/16 Tr 2244 WACM-103.1 Freeland, Pa. w/Country mx.

6/3 Tr 2000 WBGD-91.9 Bricktown, N.J. with rock, highly distorted audio  
 2004 WWOC-94.3T Avalon, N.J. Briefly o/WJLK w/Stereo 94 IDs only.  
 Ads revealed location.  
 2200 WLRB-92.7 Bethany Beach, Del. with 40ish pop music.

6/6 Es 1913 KOSU-91.7 Stillwater, Okla. w/sports, Okla. NX, ID  
 1920 KGOW-92.1 Broken Arrow, Okla. w/KTOW-KGOW IDs, country  
 1922 KAAG-92.9 Tulsa w/current rock and apparently now live (?)  
 1959 KSMU-91.1 Springfield, Mo. ending classical mx, ID.  
 2000 KMRJ-96.9 Pittsburg, Kansas. KSEK-KMRJ IDs, CBS Nx.  
 2007 KTTS-94.7 Springfield, Mo. w/country, SID, ads, over local  
 2010 KYFM-100.1 Bartlesville, Okla. w/ad, ID.  
 2012 KMOD-97.5 Tulsa w/ads, ID, progressive. Over WPST.  
 2022 KRAV-96.5T Tulsa w/rock, FM-96 Tulsa ID.  
 2027 KKMA-104.5 Pryor, Okla. w/ID, wx.

6/8 Tr 2100-Midnight. Strong trop to Norfolk AND SE New England (WRLM WVLC-104.7, etc.). Nothing new.

6/16 Es 1806 WBQM-91.7 Decatur, Ala. ending wx, ID, into religion.  
 1813 WHJT-93.5 Clinton, Miss. w/rock, ID, 924-4505 request line.  
 1814 KBFC-93.5 Forrest City, Ark. w/ID  
 1817 WZZK-104.7 Birmingham, Ala. with PSA, ID, country  
 1828 WFSU-91.5 Tallahassee, Fla. ending All Things Considered, ID.  
 1830 WPLN-90.3 Nashville, Tenn. w/ID.  
 1832 WJNS-92.1 Yazoo City, Miss. w/Country Mx Nx.  
 1837 WBLX-92.9 Mobile, Ala. w/ads  
 1845 KDDI-96.7 Oak Grove, La. with KWCL-KDDI Wx Watch  
 1858 WDRU-95.3 Drew, Miss. w/ID, wx, country  
 1900 WCPC-93.3 Houston, Miss. w/ID, nx  
 1901 WDIX-89.1 Olivehill, Tenn. with s/on.  
 1909 WFCS-89.3 Pensacola soliciting letters  
 1917 ??? -93.5 W/Baxley (Ga.-?) ads - ideas?  
 1921 ??? -104.9 A Ga. with Super G and G-105 IDs - WHCG Metter-?  
 1928 WGTV-92.9 Valdosta, Ga. with country, ID, ads.  
 2000 WIRB-96.9 Enterprise, Ala. w/ID.

73, Joe

William O Dickerman - IMCA - PO Box 786 - Williamsport, PA 17701 (EDT)  
 RX: Zenith R7000 Y-1 Transoceanic with telescoping antenna. Most stations below were recorded on GE cassette recorder, then IDed later from tape. (T=tentative) Underlined=verified. Totals=133. Thanks to Harry Hayes for giving me tips on Es opening times.

6/12 Tr 1051 <u>WWKS</u> 106.7 PA Beaver Falls(168)	6/17 Est2048 KBUY 93.9 TX Ft.Worth(1242)SS
6/12 Es 1254 WAIW 96.9 FL J'ville (793)	T2055 WRR 101.1 TS Dallas(1220)cl
T1259 WSGF 95.5 GA Savannah (667)	2059 WMEZ 94.1 FL Pensacola(934)
1304 WTCQ 97.7 GA Vidalia "980"(686)	2103 KMEZ 100.3 TX Dallas(1220)EZ100
6/13 Tr 1200 <u>WDBA</u> 107.3 PA DuBois relig(87)	T2108 KZAK 93.1 TX Tyler(1170)
6/16 Tr 1344 WNTQ 93.1 NY Syr.(132) EBS test	T2110 WJAD 97.3 GA Bainbridge(824)
6/27 Es 2017 WQST 92.5 MS Forest(915) lcl ad	T2140+WXTY 93.5 MS Bay Spgs(930)
2024 KCHU 90.9 TX Dallas(1220) ad	2147 KAPB 97.7 LA Marks'1(915)
2029 WPMI 98.9 AL Montg.(792) CBS,wx	2200 KFRA 90.1 TX Dallas(1220)
T2033 WSJC 107.5 MS Magee wx (945)	2206 WEZB 97.1 LA New Orleans(1067)
2033 WEMX 106.7 AL Enterprise(839)\$107	T2217 KKAJ 95.7 OK Ardmore(1184)PSA
2037 WPCS 89.3 FL Pensacola (934)	T2225 KLUR 99.9 TX Wichita Falls(1260)
T2043 WKII 94.7 MS Jackson (945)	All 6/27 Es new to log except WQST.

Fred Nordquist - 7945 Roxford Road - Clay, NY 13041 (EDT)

RX: AJ-15 ANT: JFD LPL-FM10A at 45° AGL. New underlined. Totals now at 820. Great Es no.:  
 6/13 Es WMCU 89.7 FL ID relig.  
 6/16 Es 1747 WCCF 92.7 FL MoR ads  
   1803 WOOF 99.7 AL Dothan lcl NY  
   1805 to 1847 many unm FL  
   1847 WTAN 95.7 FL Clearwater MoR  
   1849 WMTW 93.9 GA Moultrie cw  
   1950 Cuba 90.5 SS lessons  
   1952 to 1959 So. FL strong  
   2000 WGMC 101.9 NC Gastonia (615)  
 6/26 Es 0943 to 0947 UNIDS  
   1141 ZEM 89.1 Bermuda lcl ads/TC  
   2104 to 2333 weak to FL WFUZ et al  
 6/27 Es 1059 to 1114, 2253 to 2400 Es to FL  
 6/28 Es 0000 to 0030 tunes out FL MS LA  
   2122 to 2300 very strong to FL  
   2300 to 0000 super AL MS LA TX OK NB  
   2145 WDUV 103.3 FL Brandon lcl ad  
   2208 WALA 97.3 FL Miami  
   2216 WHYL 100.7 FL Ft Lauderdale Y100  
 New location seems to provide extended FM reception due to lack of structures/trees. Neighboring WZG QRM is bearable as long as ant. is not pointed directly at tower. 73.

6/28 Es 2300 <u>WSPB</u> 106.3 FL Sarasota rr
2309 <u>WQST</u> 92.5 MS Forest cw
2314 <u>WCIN</u> 92.3 LA Laplace CBS/s/off
2317 <u>KEXO</u> 92.3 NB Omaha EZ mx
2319 <u>KERA</u> 90.1 TX Dallas
2339 <u>KGWS</u> 89.5 OK Tulsa rr
2348 <u>KCET</u> 89.3 TX Dallas relig
2357 <u>KLUR</u> 99.9 TX Wichita Falls
6/29 Es 0002 <u>KOEC</u> 90.7 MO Joplin relig/s/off
0010 <u>KNUS</u> 98.7 TX Dallas ad
7/9 Ant. installed at new residence
Tr 2227 <u>WEKU</u> 88.9 KY Richmond lcl promo
2300 to 2359 Tr to SW-PA OH
2359 <u>WNWR</u> 90.9 OH Canal Fulton s/off (325 mi) 350w!
7/10 Tr 0017+ All Detroit stations.
0955 <u>WCLG</u> 100.1 WV Morgantown rr "CLG"
GW 2235 **** 90.3 NY Syracuse Bootleg sta. at SU w/vulgar CL - folk mx/UG rr
7/11 Es 2018 <u>WMEZ</u> 94.1 FL Pensacola
7/14 Es 1958 to 2038 <u>KHLS</u> 93.9 SD Rapid City Still no Wyoming DX.

Peter Oprisko - 1932 New York Avenue - Whiting, IN 46394 (CDT) 219-659-2954

Wow---that July VUD was really something! It's been an exciting month--the 4th of July Bicentennial celebration, parades, fireworks, etc. DXing excitement continues on the educational band also:

- 1.) Added two new states, VA and FL--now 12 states and 1 Canadian Province.
- 2.) Logged my 88th educational band station (in just 6½ months)--a level of accomplishment unprecedented for such a short period of time.

Equipment: Sony ST-5130 tuner, single Channel Master Probe 9 (Model 4408) antenna mounted horizontally at 60 feet on a Rohn 20-G tower, Cornell Dubilier AR-40 rotor and Belden 8285 300-ohm lead-in. (No traps, no booster)

6-26 Tr 2000 WSIE 88.7 IL Edwardsville (235) ID, UPI, "Temp on 'The Hill'.."
6-27 0242 WYSO 91.5 OH Yellow Springs (205) ID, all night trivia quiz
0558 WVWR 89.1 VA Roanoke (510) Classical mx prog "1st Hearing," ID
6-30 0600 WCAL 89.3 MN Northfield (350) s/on; lucky catch---WNIU s/on late!
7-05 0103 KLSE 91.7 MN Rushford (275) ID w/complete s/off, ant. @ 587 ft.
7-08 0609 WSIU 91.9 IL Carbondale (280) nx, wx, "Our next news on WSIU..."
7-14 Es 1700 WMCU 89.7 FL Miami (1100) church PSA's, "Musical Potpourri"
7-19 Tr 0505 WNNU 90.1 MI Marquette (350) N. Mi U., new call letters
7-21 0005 WBKY 91.3 KY Lexington (325) nx, s/off ID, STL WGV-49
7-25 Es 2000 KSUC 88.3 TX Keane (1300) Sermon on energy by Norman Wilson, ID
Tr 2312 KRSW 91.7 MN Pipestone (500) anncr Morrison Keeler, Bach cantata
7-26 Tr 0314 KOPN 89.5 MO Columbia (500) Paganini's "Rhapsody on a Theme"

73, Pete

# WESTERN FM-DX

Steven C. Wiseblood  
707 Loma Way  
Santa Maria, CA 93454  
Deadline: Sept. 12

Fred McCormack, Des Lacs ND 58733 (CDT) (June 3-30) New stations underlined

\*indicates Fargo DX

Fargo antenna: Rabbit Ears

*6 Es 1910 KOYE	94.9 TX	Laredo, RR	1345	19*Es 0029 WKTU	92.3 NY	New York	1207
2005 KELT	94.5 TX	Harlingen, Great American Country		0050 CFQR	92.5 PQ	Montreal	1110
*7 Es 1822 KBAT	93.3 TX	Midland, Great American Country	1065	26*Es 2045 KSAQ	100.3 TX	San Antonio	
1823 KLBK	94.5 TX	Lubbock, RR	960	28 Es 1820 KNIX	102.5 AZ	Phoenix	1150
1848 KBIN	94.5 NM	Roswell, FM-95	1020	1824 KYOR	100.3 CA	Blythe	1220
1905 WTOC	94.1 GA	Savannah, Country Living		1830 KJOK	93.1 AZ	Yuma, RR	1270
1912 WPXI	95.1 SC	Charleston, RR, \$95		2147 KAPB	97.7 LA	Marksville	1280
1934 WHIN	104.5 TN	Gallatin, RR	895	2150 WFMX	105.7 NC	Statesville	1365
*8 Tr 0836 KEYA	88.5 ND	Belcourt	195	2239 WSMJ	99.5 IN	Greenfield	975
0845 KOSN	99.3 MN	Thief River Falls, EL		2244 WIDD	99.3 TN	Elizabethtown, SGR	
*9 Es 1915 brief Es from Idaho, no ID's				2245 WROQ	95.1 NC	Charlotte	1385
Tr 2241 WHMH	101.7 MN	Sauk Rapids, RR	155	2310 WAKO	103.1 IL	Lawrenceville, C&W	
2300 KMSR	94.3 MN	Sauk Center, s/off		2330 WMEW	88.9 TN	Chattanooga, REL	
10*Tr 0524 KTCR	97.1 MN	Minneapolis, C&W	215	2332 WEGY	93.3 TN	Tullahoma, "Boogie"	
0600 KYSM	103.5 MN	Mankato, RR	230	2335 WBIE	101.5 GA	Marietta	1320
0613 WHIZ	100.7 WI	Eau Claire, RR	290	2336 WQXI	94.1 GA	Smyrna, RR	1325
0618 WJMC	96.3 WI	Rice Lake, RR	260	2338 WKSI	102.3 IL	Eldorado	975
13 Es 1455 KIOI	101.3 CA	San Francisco, RR		2340 KGMO	100.7 MO	Cape Girardeau	970
1457 KKIQ	101.7 CA	Livermore, RR	1250	2341 WADI	95.3 MS	Corinth	1135
1459 KSTN	107.3 CA	Stockton, ethnic		2343 WKYQ	93.3 KY	Paducah, Good Country	
1502 KABL	98.1 CA	San Francisco, 1275		2344 WZZK	104.7 AL	Birmingham	1275
"Cable music"				2348 KITM	98.9 MO	Kennett	1015
1510 KUIC	95.3 CA	Vacaville	1225	2359 KSMU	91.1 MO	Springfield	860
1518 KCBS	98.9 CA	San Francisco	1275				
1543 KFKE	92.5 CA	Sacramento, CL	1200				
1558 KNEV	95.5 NV	Reno, Cl	1085				
1559 KNIS	94.7 NV	Carson City, REL					
1619 KVNV	99.3 NV	Fallon	1045				
1642 KMTW	96.5 ID	Twin Falls, K-W	740				
2118 KTRI	92.3 NV	Las Vegas, C&W	1075				
2120 KFMS	101.9 NV	Las Vegas	1075				

Clint McAuliffe, 1103 7<sup>th</sup> St., Apt. 6E, Greeley CO 80631 (MDT) (7 May- 1July)

DX Equipment: Pioneer SX 636 receiver w/Jerrold 14-el YAGI @ 25'.

7 Tr 1100 KKLS	93.9 SD	Rapid City	270	14 Es 1010	94.5 TX	Harlingen	KELT 1080
9 Tr 1935 KUPK	97.3 KS	Garden City	270	1015	94.1 NL	Monterrey	XET 1080
17 Tr 0800 KIBC	93.5 NE	Ogallala	170	MS 1030	103.9 WY	Mammoth	K*280*460
4 Es 1300 WBJW	105.1 FL	Orlando	1580	16 Es 1155 WDYN	89.7 TN	Chattanooga	1140
1320 WQXI	94.1 GA	Smyrna	1220	1200 WMBW	88.9 TN	Chattanooga	1140
7 Es 1305 WSWW	105.5 VA	Pennington Gap	1200	26 Es 1930 WMOT	89.5 TN	Murfreesboro	1040
Tr 1315 KMLA	94.5 KS	Scott City	240	2105 WALT	97.1 MS	Meridian	1070
Es 1320 WLAP	94.5 KY	Lexington	1110	27 Es 1615 CJOV	104.7 EC	Kelowna	990
1330 WITO	107.1 OH	Ironton	1190	2345 WLRC	92.3 VA	Roanoke	1370
1332 WMST	105.5 KY	Mt. Sterling	1130	28 Es 0010 WKYS	93.9 DC	Washington	1490
1334 WBIF	105.5 IN	Bedford	990	1300 KQED	88.5 CA	San Francisco	1010
1340 WMRT	88.3 OH	Marietta	1240	29 Es 0915 WMEZ	94.1 FL	Pensacola	1220
1343 WEKU	88.9 KY	Richmond	1120	0930 WPCH	89.3 FL	Pensacola	1220
1346 WCSU	88.9 OH	Wilberforce	1110	0940 WQID	93.7 MS	Biloxi	1140
1347 WJVS	88.3 OH	Cincinnati	1090	0945 KRLY	93.7 TX	Houston	920
1400 WJOI	93.7 PA	Pittsburgh	1310	1010 KEEZ	97.3 TX	San Antonio	840
1405 WMVO	93.7 OH	Mt. Vernon	1170	1020 KROB	99.9 TX	Robetown	970
				1 Tr 1110 KYEZ	93.7 KS	Salina	390

I am new to FM DX and it is exciting. I didn't even know that I could receive FM stations beyond the horizon until I joined the WIFDA. Greeley is about 25 miles east of the rockies. During cloudy days, signal strengths from stations in Craig, Vail and Breckenridge climb. I've received only two other stations west of the rockies, both by E-skip. I'm convinced anything can happen with E-skip. I was amazed at the distances of the stations on June 7.

(Good Report, Clint. I hope to hear more from you soon.) -sw

Patrick Martin, P.O. Box 14192, Portland OR 97214 (May 15-June 30) (PDT)  
 Receiver: Magnavox AM/FM Antenna: Lafayette 10-el yagi  
 15 Es 1635 unID 106.1 Canada CBC nx(CJOY?-sw) 3 Es 1000 unID 105.3 C&W  
 28 MS 0957 KRSP 103.5 UT SLC, RR 900 22 Tr 2200 KERO 106.9 WA Bremerton, C&W 160  
 31 Tr 1515 KLVR 90.5 WA Longview, Cl 50 23 Tr 2110 KLYN 106.5 WA Lynden, EL 240  
 I haven't heard a lot lately as most of my DX time has been involved with TV. With KQIV-  
 106.7 off, I have been able to receive a few extras on the 106-107 frequency range. KQIV  
 got into a hassle with a court order and was told to leave the air. The station will be  
 up for bids the last of July. There are something like 15 bidders on the frequency-106.7,  
 so who knows what will happen. The frequency of 103.3 is still open for a class C license.  
 KISN-910 applied for that a few years ago but was turned down because of complications.  
 73's, Patrick

Danny Buntin, 1020 S. Duncan, Stillwater OK 74074 (June 11-July 7) (CDT)

Present log Totals: 561

11 Tr 2000 Good Tr extending from S.W. MO to	27 Es
East IA, all relogs except-	1901 WLRG 92.3 VA Roanoke, "92 FM"
2200 KCUR 89.3 MO Kansas City, JAZ 250	1920 WBBC 104.7 MD Ocean City, ad 1220
2205 KDKD 95.3 MO Clinton, new on air	1921 WVHR 101.3 VA Hampton, wx 980
2235 KBUR 107.3 IA Burlington, "Rock-107"	1929 WKCB 107.1 KY Hindman, ID 790
2300 KVRV 106.5 IA Davenport, EL 515	1930 WRVQ 94.5 VA Richmond 1100
21 Es 1714 WDBO 92.3 FL Orlando, EL 1060	1936 WXRA 105.9 VA Woodbridge 1085
26 Es 1408 WJCT 89.9 FL Jacksonville 980	1942 WPGC 95.5 MD Morningside, ID 1110
27 Es	1951 WTR 95.9 DE Bethany Beach 1220
1344 WJAX 95.1 FL Jacksonville	1958 WCOL 92.3 OH Columbus 820
1408 WNCT 107.7 NC Greenville, ID	1959 WLRV 93.5 SC Columbia, ID 930
1411 WSFL 106.5 NC Gridego, ID	2001 WPBF 105.9 OH Middletown 740
1422 WFLS 93.3 VA Fredericksburg, ID	2059 WFLN 95.7 PA Philadelphia 1220
1430 WTTR 100.7 MD Westminster, ad, ID	2100 WPSI 107.9 MD Annapolis, ID 1160
1435 WETA 90.9 DC Washington	2100 WGET 107.9 PA Gettysburg, ID 1105
1439 WASH 97.1 DC Washington	2103 WHDG 103.7 MD Havre de Grace 1180
1451 WESA 98.3 PA Charleroi, ID, RR	980 2105 WEJH 101.5 NJ Trenton, ID 1245
1454 WMNR 93.3 PA Philadelphia, ID	2116 WNAV 99.1 MD Annapolis, ID, wx 1160
1456 WIOV 105.1 PA Ephrata	2125 WMGK 102.9 PA Philadelphia, ID 1220
1500 WMIS 98.1 MA New Bedford	2129 WDAS 105.3 PA Philadelphia, ad 1220
1510 WAER 88.3 NY Syracuse, ID	2145 WISL 95.3 PA Shamokin, ID 1170
1515- had to be away from the radio until:	28 Es 2250 surprisingly late Es, T-storm
1704 WFUZ 93.7 FL Ocala, ID	interferes with weak signals.
1714 WIVY 102.9 FL Jacksonville, ID	1010 2300 WPDC 106.7 PA Elizabethtown, s/off
1819 WWMZ 93.5 SC Summerville, ID	2310 WMR 102.9 NY Syracuse 1200
1820 WMRN 95.1 NC Kinston, ad	2325 Es mostly dead, storm almost here
1828 WCMG 100.5 VA Norfolk, ID	1110 29 Es 0920 brief from Mexico
1829 WBT- 107.9 NC Charlotte, ID	1090 7 Es 1129 MUF 107.7
1835 WQDR 94.7 NC Raleigh, ad	1142 WQMG 97.1 NC Greensboro, ID 1075
1845 WQRK 104.5 VA Norfolk	1145 unID: K-94 never talks, ad for
1849 WRLX 101.1 VA Richmond, "XL-102", RR 1100	Virginia Beach, VA (WYVA, Yorktown?sw)
1850 WBDX 106.3 VA Bluefield, ad	1147 WJLY 92.1 NC Moyock, ID 1100
1851 WNCT 107.7 NC Greenfield, ad	1150 1148 WFLA 93.3 FL Tampa, ad 1040
1857 WKEZ 95.7 VA Norfolk, EL	In rechecking, I found that there was
1900 WFVR 94.9 VA Roanoke, ID	no CBN in Canada on 95.1. What I heard

was apparently short for "Christian Broad-

casting Network from WMIV, 95.1, in Bristol Center, NY. Happy DXing, Danny

Jim Pizzi, 300 Park, Orcutt CA 93454 (June 20-July 3) (PDT)

Present log totals: 367

20 Tr 0146 KFCF? 99.3 CA Fresno, //KPFA	135 2 Es 1838 KSCR 95.7 NM Hobbs, ID
26 Es 0936 KACV? 89.9 TX Amarillo, \$RR	1839 unID east, 97.7, RR
28 Es 1209 KKLS? 93.9 SD Rapid City, discuss.	1842 KLJR 99.9 TX Wichita Falls
1418 KUSD 89.7 SD Vermillion, \$NPR, ID	1845 KWXI 97.1 TX Fort Worth
1431 KELO 92.5 SD Sioux Falls, \$EL	1848 unID east, 101.1, EL
1432 KWNC 96.5 SD Sioux Falls, REL	1848 KXXX 100.3 KS Colby, EL
2 Es 1711 KSET 94.7 TX El Paso, \$EL	1850 KFDI 101.3 KS Wichita
1711 KPAS? 93.9 TX El Paso, EL	1852 KARD 107.3 KS Wichita, ads
1738 KMOW? 89.1 KS Wichita, RR	1858 KACV? 89.9 TX Amarillo, RR
1739 KOSU 91.7 OK Stillwater	1908 KSKU 102.1 KS Hutchinson, \$ID
1832 KEDM 94.9 NM Roswell	1912 KWAS? 101.9 REL
1835 KGNO? 95.5 KS Dodge City, \$RR	1914 KWOE 106.9 OK Clinton, \$C&W

## WESTERN FM DX

Jim Pizzi-Continued.....

2 Es 1915 unID 104.3 Gospel, Radio Bible Hour  
 1916 KGLC? 100.9 OK Miami, EL  
 1917 KJAK? 100.5 OK Okc, C&W, Mutual nx  
 1920 KPJL 98.9 OK Okc, \$SOL  
 1927 KKNG 92.5 OK Okc, \$EL  
 1927 KEBC 94.7 OK Okc, C&W  
 1929 KPNB 101.9 OK Okc, \$EL  
 1931 KWHP 97.7 OK Edmond, SGR  
 1936 unID 97.7 BB game u/KWHP  
 1938 KAKC 92.9 OK Tulsa, \$GR, ID,  
 Total Gold Radio  
 1938 KCRC? 96.9 OK \$BB game, ads  
 3 Tr 0819 KBFB 89.1 CA Santa Rosa, SS  
 845 KEZR 102.3 CA Modesto, SS  
 0847 KCTY 103.9 CA Salinas, SS  
 Es 0910 KBLJ 92.1 CO La Junta, ID  
 Tr 0919 KMFT 97.5 CA Merced  
 Es 1353 KACV 89.9 TX Amarillo, \$RR, ID  
 1359 KEMF 98.3 TX Spearman, C&W  
 1410 KOSU 91.7 OK Stillwater  
 1410 KOAS? 90.9 OK Stillwater, C&W  
 1415 KFLA? 94.5 KS Scott City, mono  
 1426 KKAJ 95.7 OK Ardmore, \$RR  
 1438 KAKC 92.9 OK Tulsa, SGR  
 1439 KCRC 96.9 OK Enid, \$EL  
 Tr 1444 KLON 88.1 CA Long Beach  
 6 Es 1709 KOYE 94.9 TX Laredo, \$RR, ID  
 1711 KQXX 98.5 TX McAllen, SS, auto  
 1732 KITY 92.9 TX San Antonio  
 1733 KNFM 92.3 TX Midland

AUGUST 1976

6 Es 1736 KTEP 88.5 TX El Paso, NPR, \$nx  
 1737 KUE 90.7 TX Austin  
 1737 KMFA 89.5 TX Austin, \$CL  
 1739 KLOU 96.5 TX Corpus Christi, \$EL  
 1743 KGTM 96.7 TX Georgetown, mono RR  
 1748 XHEC 91.9 COAH Sabinas, SS, mono  
 1754 KWLW 93.9 TX San Angelo, EL  
 1755 XHRE 105.5 COAH Piedras Negras, RR  
 1800 KNAF 101.1 TX Fredericksburg, ID  
 1810 KTPM 102.7 TX San Antonio, \$RR  
 1813 KEXL 104.5 TX San Antonio, RR  
 1815 KWED 105.3 TX Seguin, \$EL, ID  
 1816 KBUC 107.5 TX San Antonio, \$C&W  
 1820 KPLE 104.9 TX Temple, EL, ID  
 1821 KRMH 103.7 TX San Marcos, \$MoR, EL  
 1823 KASE 100.7 TX Austin, \$EL  
 1832 KLBJ 93.7 TX Austin, \$RR  
 1842 KQXT 101.9 TX San Antonio, EL  
 1915 KNRC 106.9 TX Conroe, \$RR  
 1917 KHCB 105.7 TX Houston, gospel, REL  
 1919 KRE 104.1 TX Houston, RR, dj  
 1919 KQUE 102.9 TX Houston, EL  
 1921 KFMK 97.9 TX Houston, REL  
 1922 KZEW 97.9 TX Dallas, \$RR  
 1924 KNIT 105.1 TX Abilene  
 1934 KLXY 102.1 TX Clear Lake City  
 1936 KTON 106.3 TX Belton, C&W, ID  
 1938 KNBT 92.1 TX New Braunfels, ID  
 1939 KIKK 95.7 TX Houston, C&W  
 1957 KQX 96.7 TX Sweetwater, EL

Steven C. Wiseblood, 707 Loma Way, Santa Maria CA 93454 (PDT) (June 20- July 17)

Receivers: Carnegie TR-1305 &amp; Sylvania (1976 model) AM&amp;FM\$ receiver

Antenna: FMAG @ 15' w/rotor &amp; Finco 65-7 antenna pre-amp

20 Tr 1530 KWIZ 96.7 CA Santa Ana, ID, MoR/RR 2 Es 1958 KRST 92.3 NM Albuquerque, RR, ID  
 1555 KPSD 94.1 CA San Diego, Cl 230 3 Es 0911 KFLA 94.5 KS Scott City  
 2308 XHERS 104.5 BCN Tijuana, "Formula Melodica\_Musica para en amorados" 245 0914 KSPZ 92.9 CO Colorado Sprs., nx  
 2310 XHIS 90.3 BCN Tijuana, EL/MoR, SS 1409 KUID 91.7 ID Moscow, NPR  
 2310 XHRM 92.5 BCN Tijuana, EE-Soul 245 1452 KGIM 97.7 MT Anaconda, ad, PSA  
 25 Es 0817 KSET 94.7 TX El Paso, EL 826 1453 KNUW 94.5 MT Great Falls Ac nx  
 0819 KTEM 88.5 TX El Paso 826 1458 KALS 97.1 MT Kalispell, JAZ  
 0839 KRWG 90.7 NM Las Cruces, talk 6 Es 1728 KSET 94.7 TX El Paso, \$EL  
 0841 KBAD 92.1 NM Carlsbad, C&W 1731 KTEP 88.5 TX El Paso, NPR  
 26 Es 1012 KRST 92.3 NM Albuquerque, Pr.RR 1734 KNFM 92.3 TX Midland, MoR  
 1012 KIPC 91.5 NM Albuquerque, ads 1734 KBAD 92.1 NM Carlsbad, C&W  
 1015 KANW 89.1 NM Albuquerque, Hits, ID 1735 XHTA 94.5 COAH Piedras Negras, strong w/mono-MoR, "R. Felicidad" ID  
 28 Es 1424 KUSD 89.7 SD Vermillion, \$NPR, ID 1735 XHNOE? 94.3 COAH Nuevo Laredo, \$SS  
 1428 KQHU 104.1 SD Yankton, \$nx, 84° 1738 KLXY 94.7 TX San Angelo, RR, ID  
 1432 KELO 92.5 SD Sioux Falls, wx, 75° 1740 KRWG 90.7 NM Las Cruces, NPR  
 1443 KNWC 96.5 SD Sioux Falls, wx 1744 KNET 92.1 TX New Braunfels, EL, "Radio New Braunfels"  
 30 Tr 0909 KVCR 91.9 CA San Bernardino, Cl 1746 KPJH 94.3 TX Fort Stockton, \$MoR  
 2 Es 1717 KSET 94.7 TX El Paso, \$EL 1754 XHEC 91.9 COAH Sabinas, EL, ad mentions Nueva Rosita, slight hum.  
 1718 KPJH 94.3 TX Fort Stockton, Del-o 1830 KWED 105.3 TX Seguin, \$nx  
 1928 KBAD? 92.1 NM Carlsbad, C&W 1831 KEXL 104.5 TX San Antonio, RR  
 1731 KNFM 92.3 TX Midland, JAZ, ID 1835 KBUC 107.5 TX San Antonio, nx  
 1732 KLXY 94.7 TX San Angelo, ID, Hits 1854 KRST? 92.3 NM Albuquerque, RR  
 1846 KZEW 97.9 TX Dallas, RR, Hits 1905 KCWM 95.1 TX Victoria, RR  
 1946 KEBC 94.7 OK Oklahoma City, C&W 1908 KLER 94.5 TX Houston, Cl  
 1912 KPNB 101.9 OK Okc, EL, ID 1916 KNET? 92.1 TX New Braunfels, BB  
 1916 KBBY 104.3 TX Borger, C&W 1919 KWLW 93.9 TX San Angelo, MoR  
 1917 KKNG 92.5 OK Okc, KING-\$92, EL 1922 KIKK 95.7 TX Houston, C&W  
 1923 KGOU 106.3 OK Norman, wx 1924 KGTM 96.7 TX Georgetown, BB  
 1924 KOSU 91.7 OK Stillwater, Cl/EL 1924 KQIF 96.9 TX Odessa, EL, ad

6 Es 1951 KPLE 104.9 TX Temple, EL, auto  
 1955 KOKE 101.1 TX Brownwood, C&W  
 2002 KCHU 90.9 TX Dallas, ID  
 7 Es 0818 KKLS 93.9 SD Rapid City, RR, ID  
 0819 KVSR 97.9 SD Rapid City, REL  
 0822 KAWY 94.5 WY Casper, auto RR  
 0824 KEMR 94.5 ND Bismarck, MoR  
 0828 KFYR 92.9 ND Bismarck, "Y-93", RR  
 0837 KRSW 91.7 MN Pipestone, Cl  
 9 Es 1841 KSET? 94.7 TX El Paso, EL  
 11 Tr 1149 KSON 97.3 CA San Diego, C&W 230  
 1152 KDIG 98.1 CA San Diego, Ac nx  
 1155 KEXY 96.5 CA San Diego, EL, auto  
 1157 KLRO 94.9 CA San Diego, REL, nx,  
 Portuguese at 1200  
 1201 XHQZ 95.7 BCN Tijuana, ballads, SS  
 1202 KFMB 100.7 CA San Diego, "B-100", RR  
 1204 KFSD 94.1 CA San Diego, \$C1 230  
 1205 XHRM 92.5 BCN Tijuana, Latin/MoR  
 1207 XHIS 90.3 BCN Tijuana, MoR, SS  
 1210 KEZL 102.9 CA San Diego, EL, \$103  
 1210 KOZN 103.7 CA Tijuana, C&W  
 1214 XHERS 104.5 BCN Tijuana, Latin, SS  
 excellent for FM Es. TOTAL now 387 w/239 by Es from 19 states!!!!!!

15 Es 1653 KGON 92.3 OR Portland, RR 741  
 1655 KPAM 97.1 OR Portland, nx  
 1658 KJIB 99.5 OR Portland, EL  
 1659 KQFM 100.3 OR Portland, EL, SQ-100  
 "Your Favorite mx"  
 1701 KOIN 101.1 OR Portland, MoR/RR  
 1702 KINK 101.9 OR Portland, RR  
 1703 CKLG 99.3 BC Vancouver, Hits, RR  
 1705 KISM 92.9 WA Bellingham, SGR  
 1708 KERI 104.3 WA Bellingham, C&W\$  
 1712 KISW 99.9 WA Seattle, RR, Hits,  
 FM-100  
 1715 CBUF 97.7 BC Victoria, FF, C1\$  
 1715 KETO 101.5 WA Seattle, C&W  
 1715 KSEA 100.7 WA Seattle, EL  
 1725 KELA 102.9 WA Centralia, C&W  
 1727 KUOW 94.9 WA Seattle, \$NPR  
 1730 KXXI 95.7 WA Seattle, SEL  
 1730 KYAC 96.5 WA Seattle, SOL\$  
 1731 KZAM 92.5 WA Bellevue, Prog. RR  
 A fair amount of Es during June and July  
 with a few good days. July 6 and 14 were

Pat Dyer, 5315 Silvertip Drive, San Antonio TX 78228 (Jun 7- July 7) (CST)

Equipment: Allied 426; Hallicrafters SX-62 w/SAX-1 preamp

Antenna: Archer V-100 TV/FM @ 20' w/rotor

7 Es		11 Es	
1429 CJOM 88.7 ONT	ID 1230	1947 WVNO 106.1 OH ID.	1180 2028 KILA?
1439 WPTH 95.1 IN	ID 1095	1947 WMRN 106.9 OH ID	95.5 NV REL 1040
1441 WMJC 94.7 MI	ID 1235	1931 WPSI? 107.9 MD REL	1155 2047 KTRI? 92.3 NV C&W 1050
1442 WMMX 94.1 IL	ID 820	1954 WQRS? 105.1 MI C1	1485 12 Es
1442 WBRG?	98.7 MI REL	1959 WQLR 106.5 MI ID	1225 0910 WHWC? 88.3 WI 1130
1444 WJZZ 105.9 MI ads	1225	2000 WWWW 106.7 MI "W-4"	1140 0910 WHEA? 89.9 WI 1235
1450 CBL?	94.1 ONT ads	1435 2006 WSAQ 107.1 MI EL, ID	1280 1000 KEYA? 88.5 ND 1320
1509 WVIC 94.9 MI	ID 1195	2006 WSAQ 107.1 MI EL, ID	1285 1005 KFJM 89.3 ND ID 1240
1510 WHPD?	95.9 OH	2013 WXFM? 105.9 IL	1010 KSJM? 93.3 ND EL 1200
1511 WMZK?	97.9 MI ethnic	2013 WYEN 106.7 IL ad	1023 WBEZ? 91.5 IL 1045
1517 WJPM	93.7 MI EL	2024 WWJO 98.1 MN ID	1050 1024 WDAI 94.7 IL ID 1045
1521 WZZM 95.7 MI "Z-96"	1175	2038 KRNA 93.5 IA IS	1140 1024 WDHF? 95.5 IL RR 1045
1522 WKQZ	98.1 MI ads	2029 KOUR 95.3 IA ID	930 1024 WFMT? 98.7 IL Cl 1045
1523 WLLI	96.7 MI wx	1015 2042 WIAL 94.1 WI EL, ad	980 1024 WBEM? 96.3 IL MoR 1045
1525 WJGS	98.5 MI town ID	2048 KSTP 94.5 MN "KS-95", EL	1125 1024 WLAK? 93.9 IL EL 1045
1530 WATZ	93.5 MI ad	2052 KQRS? 92.5 MN RR	1028 WMEI? 90.1 IL REL 1045
1535 WCMU	89.5 MI wx	2057 KNOF 95.3 MN ID	1110 1030 KYTN? 94.7 ND EL 1240
1604 WJVM	94.3 IL ad	2059 WAYL 93.7 MN ID, EL	1110 spotty 88-89 stuff til 1100
1604 WAAG?	94.9 IL C&W	980	1150 unIDs 88-89
1647 KCII	95.3 IA ad	915	1229 KSIH 94.9 ID ID 1195
1651 W3PT	97.9 WI ID, wx	905 8 Es	1245 KBVL 94.7 CO ID, EL 820
1652 KHAK	98.1 IA ad	1150 2012 KBXL 94.1 ID EL, ID	1280 1255 KUNC? 91.5 CO 830
1658 WMRI	88.3 OH ID	945 2015 KFXD? 94.9 ID MoR	1195 1300 KCSU 90.9 CO 845
88-92 unIDs in/out for the		1180 2030 KSIH 94.9 ID wx, nx	1195 308 KGRE? 92.3 CO EL 830
next two hours.		2058 KSNN? 93.7 ID	1323 KCFR 90.1 CO promo 810
10 Es		11 Es	
1719 CJOM 88.7 ONT	1230	1001 KLON? 88.1 CA	1180 340 still in, however, at
1902 WSHA 88.9 NC SOL	1230	1001 KCSN? 88.5 CA	1210 350 on 50MHz, KL7IBG from AK
1903 WQDR 94.7 NC RR	1230	1001 KPK? 90.7 CA	1190 was coming through, so my
1914 WKYS	93.9 DC ID,	1385 1005 KECR? 93.3 CA REL	1100 attention was quickly put on
"Disco \$93 KYS"		1005 KMET? 94.7 CA RR	1190 that for the next 90 minutes.
1916 unID	94.7 MD?, DE?	1005 KLOS? 95.5 CA RR	1190 2324 KBYU? 88.9 UT 1045
1918 WYVA	94.1 VA ID	1370 1011 KPCS 89.3 CA ID	1185 2324 KUER? 90.1 UT 1080
1918 WPGC	95.5 MD ad	1385	1100 14 Es
1928 WMAR	106.5 MD "FM-106"	11 Es	1132 KCSN? 88.5 CA 1210
1929 WAVA	105.1 VA ads	1375 1918 KBYU? 88.9 UT Cl	1045 1137 KPBS? 89.5 CA 1120
1933 WEZR	106.7 VA EL	1355 1927 KUER? 90.1 UT	1080 1137 KCRW? 88.9 CA 1200
1939 WSOM	105.1 OH PSA	1265 1927 KALL? 94.1 UT EL	1080 1142 KLON 88.1 CA ID 1080
1944 WAMO	105.9 PA \$106	1280 2028 KLVM? 94.1 NV EL	1040 1714 KXTZ 94.1 NV EL, ID

## WESTERN FM DX

## HELLO, PAT DYER!

AUGUST 1976

14 Es	21 Es	26 Es
1718 KILA? 95.5 NV REL	1040 1530 WFMS 95.5 IN ID,wx 995	1000 just vy spotty 88-90
1728 KTRI 92.3 NV C&W	1050 1532 WXTN 95.3 OH nx, ID 1140	1822 unIDs 89.9, 89.3
1802 KNIS 94.7 NV REL	1370 1532 WKLR 95.3 OH obit noti.	1853 WZAL 89.3 MN 1080
1802 KNEV? 95.5 NV	1380 (I Think the capture ratio on	1855 WHSA 89.9 WI Wis.Ed.Net
1804 KBVU? 88.9 UT CL	1045 the SX-62 must be in the	1902 KSJR 90.1 MN 1135
1829 KVLV 99.3 NV ID, wx	1330 order of 10db, as I get a lot	1903 WJVM 94.3 IL ad 980
1838 KUER? 90.1 UT	1080 of co-channel without any one	1905 WDOR 93.9 WI ID 1225
1839 KALL? 94.1 UT EL	1080 station easily dominating the	1915 WWJO 98.1 MN C&W, ID
1843 KBOI 97.9 ID ad	1370 frequency.	1933 KIDA 99.9 MN ID, ad 1205
1845 KCPX 98.7 UT RR	1080 1533 WPTW 95.7 OH wx 1085	1935 KQWB 98.7 MN ID, RR 1205
1852 MUF 106.9	1536 WGCL 98.5 OH PSA 1250	1940 WSPT 97.9 WI ad 1150
1900 KBAR? 98.3 ID EL	1545 WVNO 106.1 Mansfield	1941 KPNW? 97.9 ND REL 1210
1900 KUPI 99.1 ID ads, ID	1215 1553 WBFG? 98.7 MI REL 1225	1950 MUF 107.9
1915 KCSD 89.1 AZ Navajo	1554 WSIM 98.9 IN C&W 945	1958 WYSU 88.5 OH ID 1275
2003 KZOZ? 93.3 CA	1335 1555 MUF 107.7	1959 WHLA 90.3 WI Wis.Ed.Net
lull to 2020	1559 WEBB 107.3 OH Elyria, EL	2002 WXMT 93.5 WI ad 1190
2028 KQED? 88.5 CA CL	1475 1559 WRQS 105.1 MI ID 1225	2003 WIAL 94.1 WI NBC nx
16 Es	1601 WVUD 99.9 OH ID 1055	2013 KAGE 93.5 MN Ad 1125
1009 WSCI? 89.3 SC	1602 WMUZ? 103.5 MI REL 1255	2058 WMB 98.7 WI sports nx
1215 WMCU?	1606 WPRO 99.1 OH hosp. rpt.	all finally out apx 2130
1412 WCIV?	1613 WDBN 95.9 OH ad 1230	27 Es
1414 WINZ?	1620 WHOK 95.5 OH ID, ad 1145	1028 KKLS 93.9 SD ad 1040
1414 WEDR?	1621 WQMS 96.5 OH ID 1045	1130 unID 88.1
1416 WWOG?	1623 WMVO 93.7 OH ID, ad 1180	1153 WSHA 88.9 NC SOL, ID
1417 WGLO 106.7 FL EL, ID	1623 WPCJ? 93.7 OH REL 1070	1202 WACG 90.7 GA s/on 1010
1421 WYOR 105.1 FL nx, ID	1150 1625 most over 89 out, some	1205 KWYR 93.7 SD ID 960
1424 WTAI?	1090 88's to 1653.	1205 WRCQ 95.1 NC ID 1105
1432 WDUV 103.3 FL ID, ad	980 22 Es 1132 UnID 89.3	1208 WRNS 95.1 NC ad 1275
1432 WSPE?	990 24 Es	1218 WDQR 94.7 NC ID 1105
1434 WELE 105.9 FL C&W, ID	0931 WLWT 92.5 OH ID, wx 1260	1220 WITN 93.3 NC ID 1335
1438 WKES? 101.5 FL REL	0940 WRAY 98.1 IN ID 870	many unIDs up to 98 til 1250
1438 WDAE?	975 0942 MART 98.3 IN C&W, ID 990	1515 unID 88.9
1449 WMCU	1150 0945 unID 99.1	1527 WPEZ 94.5 PA RR, ID 1280
17 Es	0948 WAKW? 93.3 OH REL 1035	1530 WEKU 88.9 KY ID 995
1522 KFSD?	1032 unIDs 88.7&91.7	1533 WLAP 94.5 KY wx 995
1522 KALJ?	1110 unID 88.3	1537 WXIL 95.1 WV Parkenburg
18 Es	25 Es	1539 WFGM 97.9 WV ID, ads
1810 unID 88.9	0926 WWWZ 93.5 SC "WZ" ID, RR	1542 WHOP 98.7 KY C&W, ID 815
1814 WXTC	0930 WXTC 96.9 SC FM-97, ID	1547 WHOK 95.5 OH 1145
"FM-97"	0932 WJAT 98.3 GA ad 980	1548 WLOA 96.9 PA ID 1290
1815 WPXI	0938 WGMB 97.7 SC ID 1065	1557 WOCH 105.9 IN ID 885
1859 WSCI	0939 WBEU 98.7 SC ID 1075	1559 WSRW 106.7 OH 1080
19 Es	0944 WJCL 96.5 GA Savannah	1559 WAMO 105.9 PA ID 1280
0818 KCFR?	0951 WTOC 94.1 GA C&W 1050	1605 WMIL 104.9 KY ID 890
21 Es	1002 WSCI? 89.3 SC Charleston	1615 WIPN 95.9 IN Franklin
1217 WHBC?	1235 unIDs 88-89 to 1030	1621 WPTH 95.1 IN ID 1035
1257 WYSU	1220 WFLA? 93.3 FL EL 985	1623 WFBQ? 94.7 IN Indy 995
1301 WQOD	1220 WVFM? 94.1 FL EL 1010	1630 WARU 98.3 IN Peru, ID
1305 WKSU?	1220 WTAN? 95.7 FL EL 960	1710 unIDs (mostly 88-89)
1309 CKLW?	1230 WUSF 89.7 FL 986	1730 WFCR 88.5 MA ID, 1690
1319 CJOM	1224 WDBO? 92.3 FL EL 1035	state #39, first double-hap
1330 WJVS	1233 WJCT? 89.9 FL 1015	1744 WHBC 94.1 OH ad 1235
1332 WVNO	1244 WMTM? 93.9 GA C&W 885	1759 WAUP 88.1 OH JAZ 1240
at this point noted revr not	1249 WSOF 95.5 GA ad 1050	1807 WSIP 98.9 KY ID 1065
picking up local 107.5, as osa	1250 WBEU 98.7 SC 1075	1759 WKSU 89.7 OH Kent, ID
in it quitting above 106.5, did	1252 WPUR 97.7 GA ID, wx 870	1808 WNGI 97.9 OH ID 1135
some quick adjustment of coil	0913 KSDS? 88.3 CA San Diego	1809 WGCL? 98.5 OH RR 1250
slugs and trimmers and screwed	0913 KLON? 88.1 CA Long Beach	1812 WLKC 105.1 WV ID 1135
up the calibration-as well as	0915 KECR? 93.3 CA REL 1100	1815 WYAN 95.9 OH ID 1160
stopping it from working above	0928 KSCN 88.5 CA ID 1210	1817 WXIL 95.1 WV Parkersb.
102MHz. I Finally did get the	0930 KJQI? 98.7 CA EL 1190	1858 WHOK 95.5 OH Lancaster
old thing working after miss-	0930 KPOL? 93.9 CA EL 1190	The period from about 1820-
ing about 60-80 minutes of	0953 KWST? 105.9 CA RR 1190	1920 was a very difficult one
what looked like a very hot	0935 KBCA 105.1 CA JAZ 1190	for ID's as stations on any
opening!		one freq. would seldom remain
1520 CJOM 88.7 QNT	1230 0935	1190 over them, A lot was likely 2Es

WESTERN FM DX

## Pat Dyer's Report Con't

AUGUST 1976

27 Es		29 Es		2 Es	
1926 WQDR	94.7 NC ID	1230	1156 XHGT?	95.7 MOR	735
1948 WZUU	95.7 WI ID	1100	1200 XEW	96.9 DF RR,	690
1953 WKIT?	93.5 WI	1100	ID, "W-FM"		
2000 WMBI	90.1 IL wx, ID	1045	1206 XHLM	96.5 MOR "Estereo	
2000 WBEZ?	91.5 IL Chicago		Mundo"		
2002 WFMT?	98.7 IL C1	1045	1211 XERC?	97.7 DF RR	690
2002 WDAI?	94.7 IL RR	1045	1211 XHNG?	98.1 MOR EL	735
2018 KKLS	93.9 SD ID	1040	1212 XHDFM?	106.5 DF Mexico	
2018 KVSR?	97.9 SD REL	1040	1212 XEQR	107.3 DF ID,	690
2020 KWYR?	93.7 SD Winner		"R. Universal"(implies MUF-135)		
2020 KCHB?	93.5 SD ID	975	30 Es	1044 WDBO? 92.3 FL EL	
2025 KBCM	95.5 IA ad	910	7-1 Es		
2028 KBHL?	95.3 NE wx	790	0833 WSHA?	88.9 NC SOL	1230
2031 KQWB?	98.7 MN RR	1205	0838 WYYD?	96.1 NC EL	1230
2031 KIDA?	99.9 MN Moorhead		0845 WQDR	94.7 NC RR, "QDR" ID	
2032 KEYC?	99.1 MN Mankato	1045	0846 WSTS?	96.5 NC REL	1165
2038 KELO?	96.9 SD Garden City		0847 WRNS?	95.1 NC C&W	1275
2038 KELO?	92.5 SD ID	975	0853 WBBO?	93.3 NC RR	1050
2038 KNWC?	96.5 SD REL	975	0855 WQSM?	98.1 NC RR	1200
2045 KUSB?	89.7 SD Vermillion		0858 WBQR	96.9 NC ID	1260
2045 KESD?	88.3 SD Brookings		0902 WSPA	98.9 SC ad	1035
28 Es			0905 WWGP?	105.5 NC C&W	1200
0959 WEKU	88.9 KY ID	995	0905 WED?	107.9 NC EL	1105
1016 WJVS	88.3 OH ID	1035	0913 WRDX?	106.5 NC C&W	1130
1023 WAUP?	88.1 OH Akron	1240	0916 WFMX	105.7 NC ads	1110
1025 MUF	95.5		0921 WRQK	98.7 NC ad	1175
1027 WMKY	90.3 KY ID	1050	0922 WMIT?	106.9 NC REL	1030
1027 WKSU	89.7 OH ID	1255	0923 WTQR	104.1 NC C&W	1150
1033 WYSU?	88.5 OH C1	1275	0928 WOKN?	102.3 NC REL	1260
1059 WMRT	88.3 OH ID	1180	0933 WAKG	103.3 VA EL, ad	1205
29 Es			0936 WXLS?	103.9 TN Erwin,	
0929 WPNE	89.3 WI ID	1190	"Disc of the TN forest"		
UnIDs to 99			0945 KBCA	105.1 CA ad	1190
0945 XEDA?	90.5 DF Mexico	690	Lull to 1005, then 88-89 UnIDs	0945 KBCA	105.1 CA ad
0945 XHQK?	91.3 DF Mexico	690	2 Es	1050	1265
0948 XHM?	88.9 DF Mexico	690	1029 KANW	89.1 NM ID	610
0949 XHSH?	95.3 DF Mexico	690	1100 KTDB	89.7 NM ID	695
0949 XEJP?	93.7 DF Mexico	690	1107 KDEF?	94.1 NM EL	610
0949 XELA?	98.5 DF C1	690	1113 WGEA	93.5 AL Geneva	765
0949 XHPOP?	99.3 DF Mexico	690	1116 KYK	96.5 CA ad	1120
0956 XEBS?	89.7 DF Mexico	690	1116 KPSD	94.1 CA C1	1120
1004 WMBI	90.1 IL IL nx	1045	1116 KDIG?	98.1 CA RR	1120
1045 XHCM?	88.5 MOR	735	1120 KPBS?	89.5 CA San Diego	2025
1125 XHMP	89.3 PUE Puebla,	735	1332 KPCS?	89.3 CA C1	1185
"Estereo Uno"			1335 KCSN	88.5 CA local show	2046
1147 XHZM	92.5 PUE ID	735	1338 KPOL?	93.9 CA MoR	1190
1147 XHJE?	94.1 PUE EL	735	1338 KMET?	94.7 CA RR	1190

7/6 had one of the most stable geographical openings into Southern California that I've seen-even though the MUF would sometimes rise from 88.1 to 105.9 in less than 2 minutes. Despite the huge size of this report, careful examination will reveal that only a few days of Es resulted in any extensive loggings in the 104-108 range. The 88.5 MA was my first by double-hop Es. On 7-7 more Es to MI, MN, WI, NC, PA, & SC but not enough time to log it.

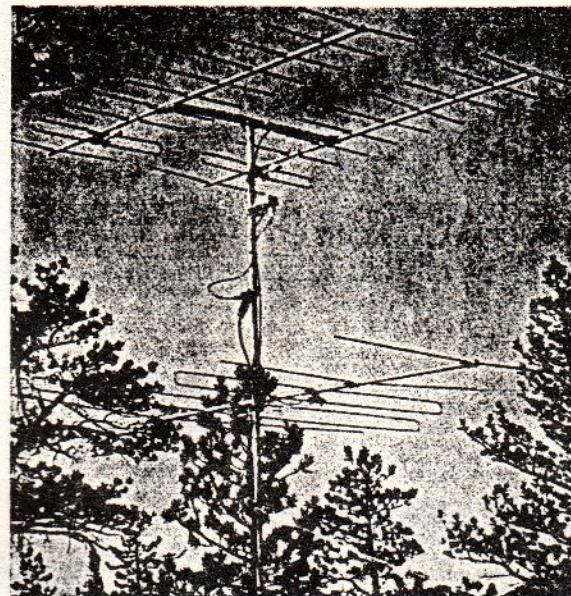
73, Pat WA5IYX

Frank Aden, Jr., 1535 NW Ithaca Ave., Bend OR 97701 (PDT) (6/9-6/27/76)

Equipment includes: SONY ST-80, WINEGARD SU-650 antenna

9 Es		9 Es		9 Es	
1600 KWBE	92.9 NE MoR	1820 KNUJ	93.1 MN RR	1330 KELO	92.5 SD RR
1614 KROA	95.1 NE	1821 KCCM	91.9 MN Edu.	1340 KLOV	104.7 SD RR
1707 KEMO	93.5 MN MoR	1822 KSJR	90.1 MN Edu.	1345 KMIT	102.3 SD ID
1800 KEYA	88.5 ND Edu.	1823 KSJN	91.1 MN Edu.	1408 KEYC	99.1 MN C&W
1806 KRVN	93.1 NE MoR	2108 CKX	96.1 MAN MoR	1424 WCCO	102.9 MN anment.
1810 KEFM	96.1 NE MoR	2316 CFW	94.3 MAN RR	1500 KWQA	95.1 MN MoR, ID
1811 KHKS	102.7 NE MoR	2317 SKY	92.1 MAN MoR	27 Es	
1822 KLIN	107.3 NE RR	13 Es		1305 WTOP	98.1 OH REL (2Es)

Now that I have my setup working again, I can get Boise-Nampa most of the time. 73's



## Stacking TV Antennas

By James E. Kluge\*

The improved directivity achieved by stacking antennas can significantly reduce or eliminate many types of television interference

■ Multiple TV-antenna arrays, reminiscent of the '50s, are making a reappearance around the country. Today, however, the principal reason for stacking antennas is not only to achieve increased gain out in the fringe areas, but also to solve interference problems through the use of highly directional antenna arrays.

Many urban areas today are plagued with multiple high-rise buildings and heavy users of electrical power, both of which cause television interference (TVI) problems. Typical TVI problems include ghosts, electrical noise and interfering radio signals which usually arrive from a direction slightly off axis from that in which the antenna is pointed. Ground reflections, ignition noise and reflections off moving ground or airborne reflectors, such as trucks and large aircraft, arrive from above or below and cause picture breakup.

Proper stacking of today's highly sophisticated TV antennas can significantly improve direc-

tivity and selectivity, as well as gain.

### OPERATION OF A SINGLE YAGI

The Yagi antenna, the most commonly used type for TV, "sees" electromagnetic radio waves in a manner similar to the way we see. Our eyes see in the general direction in which our head is pointed. Similarly, the Yagi antenna "sees" in the general direction in which its boom is pointed. When viewed from above (Fig. 1), the Yagi antenna's outline more or less resembles an arrowhead because it tapers out from front to rear. The taper is more pronounced in broad-band antennas than in single-channel antennas. The arrowhead formed by the antenna should, generally speaking, point in the direction from which the desired signal is arriving; i.e., toward the TV transmitter.

Ideally, a TV receiving antenna should "look" in a straight-line path toward the transmitting antenna and "see" nothing above, below or to either side. Not being ideal, of course, even the best TV antennas "see" a considerable amount of undesirable signals arriving from an angle off the axis of the antenna, just as our

eyes have some side vision. These signals can cause ghosts and other interference patterns on the TV screen.

A Yagi antenna is made up of many parallel elements arranged along a common axis in a horizontal plane and all oriented toward the signal source. The length, spacing and phasing of each element relative to that of the others determines how the voltages induced in individual elements reinforce (add) at the antenna terminals. The elements are arranged and spaced so that the signal waveform arrives at each element sequentially and so that the voltage induced in each antenna element combines at the antenna terminals with voltages from the other elements, to yield an optimized voltage which produces maximum gain over the desired bandwidth.

If the signal arrives from a source above or below the horizontal plane of the antenna, it will arrive at all of the Yagi elements simultaneously instead of sequentially. Under these conditions, the combined voltage at the antenna terminals will be something less than the optimum for which the antenna was designed.

\*The author is a technical editor in the Engineering & Research Division of the Winegard Company.

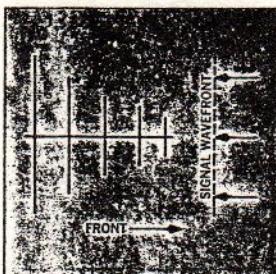


Fig. 1—Top view of a typical Yagi antenna.

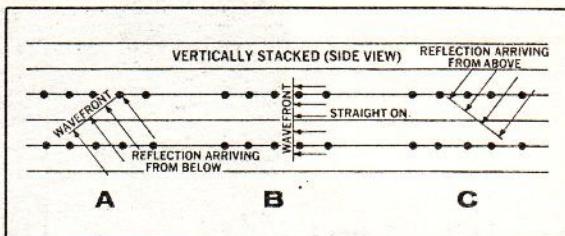


Fig. 2—Side views of vertically stacked Yagi antennas showing relationship of antenna elements and arriving signals. A) Signal reflected from below. B) Signal received straight from source. C) Signal reflected from above.

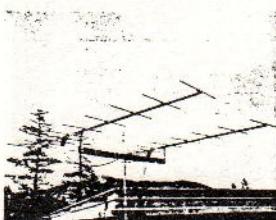


Fig. 3—Horizontal stack consisting of two Winegard Model SCX-10 ten-element, Channel 10 Yagi antennas.

#### VERTICAL STACKING

Stacking two identical antennas on a common vertical mast significantly narrows the *vertical* beam-width angle. That is, vertically stacked antennas more effectively reject those interfering signals arriving from *above or below* their horizontal plane than does a single antenna. It's as though they were looking through a horizontal venetian blind. Because there's nothing mounted to the side of either antenna, their side-to-side vision is virtually unaffected. In the process, gain increases about 2.5 dB over that of a single antenna.

Vertical stacking improves both gain and vertical directivity. This helps reduce airplane flutter and attendant picture roll, and certain types of ground noise and ground reflections.

The basic principle of stacked antennas involves the difference in the time of arrival, and therefore the phase, of signals intercepted by the antenna combination. If a pair of identical Yagi antennas are mounted one above the other, a wavelength apart, on a common vertical mast and are oriented identically (pointed) toward the signal source, any TV

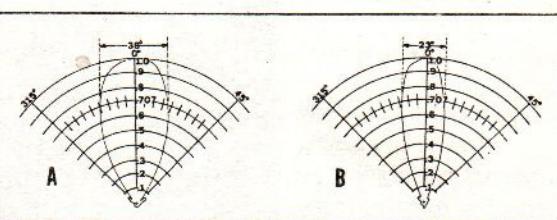


Fig. 4—Polar patterns which illustrate the effect of horizontally stacking the antennas shown in Fig. 3. A) This is the pattern for a single Winegard Model SCX-10 Yagi. B) Narrower pattern produced by horizontally stacking two Winegard SCX-10 Yagis one wavelength apart.

signals traveling horizontally and arriving from any direction will be intercepted simultaneously by both antennas.

Those signals arriving on axis from the direction in which the antenna is pointed (Fig. 2B) will be strongest.

Because the antennas are identical, the generated signal voltages arriving at the output terminals shared by the antennas will be in phase, causing them to add directly. Theoretically, there

should be a 3 dB increase (double) in signal power over that of a single antenna, but, because of losses in the coupler and cable, the actual gain increase will be somewhat less than 3 dB.

An important point to remember is that, regardless of the azimuth angle between the antenna orientation and the signal source, the arriving signal will strike any given identical points on the two antennas simultaneously. However, if the signal is arriving from a source *above or below* the horizontal plane of the antenna, the previous statement is no longer true. For example, if the wavefront is from a source *below* the plane of the antenna (Fig. 2A), the signal will arrive

first at the lower antenna and the signal voltage from the top antenna will lag the signal from the lower antenna. The signal voltages at the antenna output terminals will no longer be in phase, and partial cancellation will take place. The opposite is true if the signal arrives from above (Fig. 2C).

The angle of arrival and the resultant difference in arrival time causes a phase difference which reduces the magnitude of the combined voltages. You should begin to see now why two vertically stacked, identical antennas have a more restricted "vision" to signals arriving from a point above or below the horizontal plane than does a single antenna.

#### HORIZONTAL STACKING

Stacking two identical antennas side by side in a horizontal plane (Fig. 3) significantly narrows the *horizontal* beam-width angle, as shown in Fig. 4. That is, the antenna combination, like a horse wearing blinders, "sees" fewer interfering signals arriving from the sides while its vision up and down (in a vertical plane) is virtually unaffected. In the process, gain increases approxi-

mately 1.2 dB over that of a single antenna.

If two identical antennas are arranged side by side in a horizontal plane and the signal wavefront arrives directly from the front (Fig. 5B), each antenna "sees" the same wave or field at the same time. If the wavefront arrives from a source above or below, the same is still true, except that the individual antennas are not operating as efficiently. However, if the wavefront arrives from one side or the other (Fig. 5A and C), the antenna on the side from which the signal is arriving will "feel" the signal first, causing the voltages induced in each antenna to be out of phase. This, in turn, causes partial cancellation of the antennal voltages when they are combined.

The up and down (vertical) "vision" of a horizontal stack is comparable to that of a single antenna, but its side-to-side "vision" is more restricted.

#### QUAD STACKS

Stacking four identical antennas, two vertically and two horizontally in a rectangular or diamond pattern, restricts the vision of this combination in all directions off the axis. Called a *quad stack*, it "sees" as though it were looking through a tube pointed in the direction of the transmitting antenna. Gain is increased approximately 4 to 5 dB over that of a single antenna.

#### GENERAL TECHNIQUES

Before you start putting up an array, you should be aware of the following basic considerations which apply to dual and quad stacking of antennas:

- 1) Stack only identical antennas
- 2) Maintain approximately one wavelength spacing (at lowest channel frequency) between antennas
- 3) Cut phasing lines or connecting cables to equal lengths
- 4) Length and phase of twinlead interconnecting harnesses is critical
- 5) Horizontal supports should be nonmetallic
- 6) Avoid running interconnecting cables horizontally.

Vertical stacking is easier than horizontal stacking simply because in vertical stacks the antennas mount on a common vertical

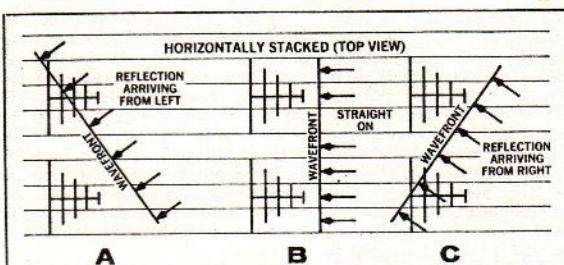


Fig. 5—Top views of horizontally stacked Yagi antennas showing relationships of antenna elements and arriving signals. A) Signal arriving from left side. B) Signal received straight from source. C) Signal arriving from right side.

Fig. 6—Harness arrangement for vertical stacking. Using a phasing harness to couple 300-ohm stacked antennas eliminates a coupler and avoids losses but can only be optimized for one channel. A harness is also susceptible to noise and is more time consuming to install. Phasing harnesses, made from balanced transmission line, must be precisely dimensioned, properly phased and carefully positioned to achieve satisfactory performance. Vertically stacked single-channel 300-ohm antennas are connected in parallel using two quarter-wave lengths or 450-ohm transmission line. Phasing polarities must be strictly observed. In absence of polarity marking on antenna, consider corresponding right and left terminals on identical antennas as same polarity.

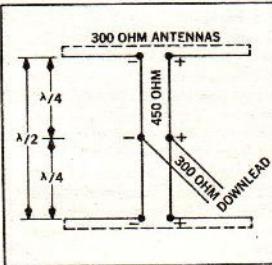
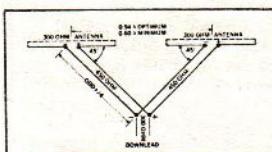


Fig. 7—Harness arrangement for horizontal stacking. Two horizontally stacked, 300-ohm, single-channel antennas require two equal lengths of 450-ohm balanced transmission line cut to an odd multiple of a quarter wavelength at the center frequency of the channel to be received and positioned at 45 degrees to the horizontal. Phasing polarity must be strictly observed. (For the purpose of connecting a phasing harness, a quad stack (2 x 2) can be envisioned as two separate vertical stacks, each preconnected and arranged in a horizontal-stacking pattern. Connect the output of each vertical stack as you would each output of identical antennas in a horizontal stacking arrangement.



mast and spacing is easily adjusted.

However, with the excellent gain and high directivity of most Yagis today, vertical stacking is seldom necessary. If additional gain is needed, two vertically stacked identical antennas spaced more than  $\frac{1}{2}$  wavelength apart will increase signal power by 3dB compared to that of one antenna. However, part of the increased gain will be lost in the connecting cables and the coupler.

Horizontally stacked antennas also must be spaced so that their booms are separated by a distance equal to more than  $\frac{1}{2}$  wavelength of the lowest channel frequency. This spacing is needed to prevent the tips of the longest reflector elements from touching. Also, the

horizontal supports must be *non-metallic*; redwood or cedar 2' x 4's are commonly used.

The severe ghosts caused by high-rise buildings, water towers and mountains can be reduced or eliminated by horizontally stacking two Yagis. However, the wavelength of a channel 2 signal exceeds 17 feet, making such an array for channel 2 unwieldy, heavy and subject to damage from ice and/or high wind. Fortunately, ghosting is more of a problem at high-band channels, and high-band antenna dimensions are significantly smaller. For these reasons, usually only high-band Yagis are stacked horizontally.

#### Spacing

For optimum performance,

stacked antennas must be properly spaced. If you do not space vertically and horizontally stacked antennas more than  $\frac{1}{2}$  wavelength apart, they will adversely "load" each other. Loading is caused by the elements of one antenna re-radiating some of their received energy into the element of the other antenna, with consequent reinforcement and cancellation of fields and voltages. *Optimum* and *minimum* spacing is 0.94 and 0.50 wavelength, respectively, at the lowest frequency received. Spacing exceeding one wavelength reduces the performance of the stack.

In a horizontal stack in which the elements are tip-to-tip and the longest element is something over .5 wavelength long, the minimum practical spacing will be some distance over .5 wavelength, to prevent the *longest* element of one antenna from touching the tip of the corresponding element of the other antenna. Recommended spacing is 0.94 wavelength between booms at the lowest channel involved.

Because of restrictions on space (usually height), there will be times when it is impractical to space antennas a full wavelength apart. In such cases it might be necessary to reduce the spacing to something less than a wavelength, but it should never be less than .5 wavelength. No physical damage will be caused by spacings closer than one wavelength, but as spacing is reduced, performance will deteriorate. At less than .5 wavelength, all of the advantages of multiple-stacked antennas are lost.

All portions of the antenna supporting structure should be made of wood or plastic. Horizontal metallic supports act like antenna elements, absorbing and reradiating the received energy in an unpredictable manner which causes unusual voltage/frequency effects from the antenna array. Where wood supports are subjected to adverse weather, redwood or cypress lumber is recommended, for extended life.

Stacked antennas should be identical. They can be broad-band, single-band or single-channel antennas, but they must be *identical*. If not, the phase of the voltages from the two antennas, when combined, will not produce the optimum signal level.

#### Interconnections

Connecting the antennas prop-

erly is as important as spacing and orienting them. Getting the individual voltages from each antenna to the point where they are combined without 1) combining them out of phase and 2) without adding extraneous signals and noise requires careful positioning, dimensioning and coupling of the antennas, the harness and/or the connecting cables.

Antennas may be coupled by a phasing harness made from balanced transmission line (Figs. 6 and 7) or they may be coupled with a hybrid antenna coupler (Figs. 8, 9 and 10). Antenna couplers are simpler to hook up and are less critical and more durable than phasing harnesses. Harnesses must be cut to the precise length for a single channel frequency, must be kept straight and untwisted and, for horizontal stack-

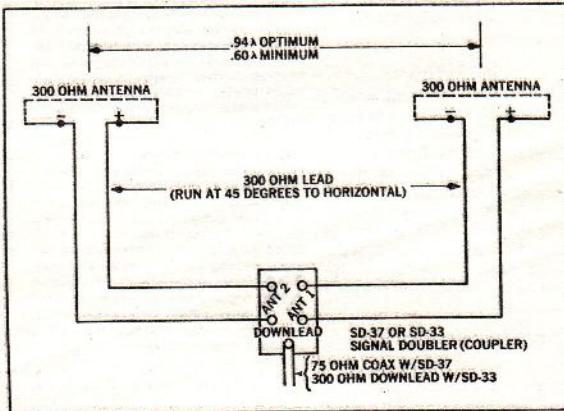


Fig. 8—Method of using SD signal doublers to couple horizontally stacked antennas.

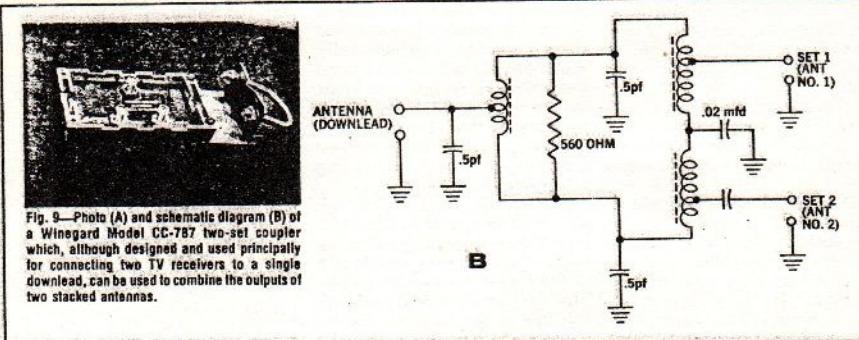


Fig. 9—Photo (A) and schematic diagram (B) of a Winegard Model CC-7B7 two-set coupler which, although designed and used principally for connecting two TV receivers to a single downlead, can be used to combine the outputs of two stacked antennas.

ing, must be installed and maintained at a 45-degree angle to the horizontal. Also, the harness connections at the antenna and the combining point must be phased properly or the performance will be less than that from only a single antenna.

Along the length of any transmission line there will be voltage maximums and minimums. If the lines are to be interconnected, cut and connect them at points at which the voltages are maximum, or at odd multiples of a quarter wavelength. If the transmission lines are of different lengths, connect them at a point where their signals are in phase (multiples of a whole wavelength, longer or shorter) so that the voltages will add.

Because wavelength changes with frequency, wiring harnesses are only practical for single-channel antennas. Multiple-band and wide-band antennas should always be connected with *broadband hybrid couplers*.

Antenna couplers simplify the interconnection of stacked antennas with 75-ohm coaxial cable, as shown in Fig. 10. Because of cable loss, the cables should be kept as short as possible and of equal lengths. They can be taped to the metal boom or mast. However, be-

cause cable is a metallic conductor, horizontal lengths parallel to antenna elements should be avoided; the cable shield might act as an antenna element, re-radiating energy into the antenna and thereby causing cancellation and ghosts.

Most MATV companies manufacture a variety of couplers to simplify combining the individual signals from stacked antennas. The Winegard Company offers two different series for stacking applications: the SD signal doubler and the CC multiset couplers. CC multiset couplers, although designed and sold principally for coupling two TV sets to a single antenna downlead, also function well as antenna couplers.

As shown in Fig. 8, SD signal

doublers combine signals from any two identical 300-ohm antennas and provide either a balanced 300-ohm output (the SD-33) or a coaxial 75-ohm output (the SD-37).

Because SD's have only 300-ohm inputs, they are not recommended as highly for horizontal stacking as the CC's, which have 75-ohm inputs.

When connecting stacked antennas, correct phasing must be achieved or a null signal (no picture) will be produced at the

coupler. If a null is observed, put a half twist in *one* of the 300-ohm lines to reverse the phase at the coupler terminals.

Series-CC 82-channel multiset

couplers (Figs. 9 and 10) are pre-

ferred over SD's for coupling iden-

tical, stacked antennas. When

used as antenna couplers, the in-

dividual antennas are coupled into the "TV-set" (output) termi-

nals of the CC and the output is

taken from the "antenna downlead" (input) terminal. The

device simply separates or com-

bines signals. It doesn't know its

input from its output and is only

concerned with the *impedance* of

the devices connected to its ter-

minals. It doesn't know and doesn't care in which direction the signal

is passing through it.

CC couplers have an 82-channel

bandpass and are available with

both 300-ohm and 75-ohm input/

outputs. CC couplers also have

two or four inputs, for both dual

and quad stacks, and are enclosed

in a weatherproof housing equip-

ped with universal mast-

mounting brackets.

Because 75-ohm coaxial cable is

recommended for interconnecting

stacked antennas, and for

downlead as well, the logical

coupler choices are the CC-787

two-set coupler, for dual stacks,

and the CC-997 four-set coupler,

for quad stacks.

Cautions to be observed when

coupling stacked antennas in-

clude cutting the coaxial inter-

connecting cables into equal

lengths, observing the correct

phase, and dressing cables away

from the antenna elements.

If 300-ohm antennas are used,

impedance-matching transfor-

mers, such as the T-28M (Fig. 10),

are recommended to adapt the an-

*continued on page 71*

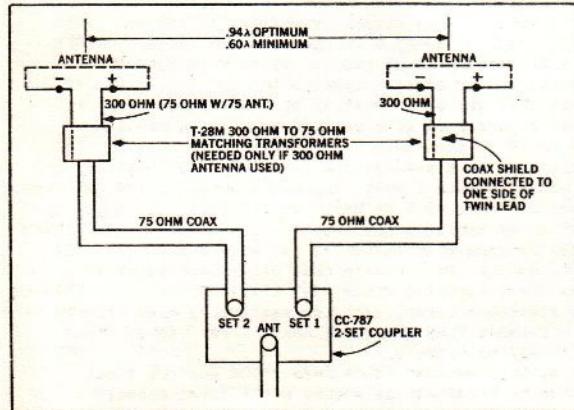


Fig. 10—Method of using the Model CC-787 two-set coupler to combine the outputs of two horizontally stacked antennas. Coupling stacked antennas with a hybrid coupler and 75-ohm coaxial cable simplifies the installation. Coaxial cable routed along the boom and metal supports causes no adverse effects. Phasing need not be considered except to insure that the coax shield be directly connected through the matching transformer to corresponding antenna terminals. A simple ohmmeter check on the matching transformer will disclose which side of the 300-ohm output lead is directly connected to the coax shield. Connecting antennas to a coupler using 300-ohm transmission line (alternate method) does require careful attention to phasing.

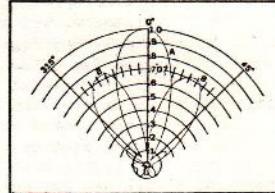


Fig. 11—Composite polar graph showing the difference between the polar pattern (A) of two in-phase horizontally stacked Yagi high-band TV antennas and the polar pattern (B) of the same two antennas out of phase.

# FM QSL CORNER

Thomas J. Yingling, Jr.  
221 Pinewood Road  
Baltimore, MD 21222

Deadline: 15th

AL WQEZ	96.5	Birmingham- Hal Fredericks, mentioning that WQEZ does not use SCA "as I feel it interferes with our clear signal in stereo." BFE
WQLT	107.5	Florence- Charles E. Manson, gm, "This is definitely the longest distance reported of our station (890 Miles). BFE
FL WQHL	98.1	Live Oak- George R. Day, Jr. gm, says "To the best of our knowledge your location is the greatest distance that we have been received" BFE
WLYF	101.5	Miami- Thomas Middleton, letter, map & folder qsl from CE TJJ
WPLA	93.3	Tampa- QSL Card with fm marked, also map & key-chain from Patrick McLaughlin, Chief Engineer. TJJ
WWFM	94.1	Lakeland- letter & map from Frank L. Berry dir of eng. TJJ
WXOS	100.3	Plantation Key- letter & map from William B. Zammit, CE TJJ
WPCV	97.5	Winter Haven-Garland Burt, station manger with letter, map bumber-sticker, & post-card TJJ
WAFG	90.3	Fort Lauderdale- letter from Wayne E. Nusbaum says that there antenna is atop there 303 feet high steeple tower of the church. TJJ
GA WZOT	107.1	Rochmart-Jimmy Telbert, dj, verifies mentions being heard in Akron, Ohio besides Duluth. TJJ
ID KMTW	96.5	Twin Falls- John K. Carson, pro. dir & ce, letter BFE
IA KCCK	88.3	Cedar Rapids- Dennis Trachta, operations coordinator, feels that I am the most distant listener to date & put me on his list to receive a program guides regularly. BFE
KXGI	101.7	Ft. Madison- Michael Finger, jr VP, reports that their AM station been heard on the west coast on nighttime test, but mine is the greatest distance reported on FM operations. BFE
KRNA	93.5	Iowa City- Robert K. Norton, jr. pro dir says he familiar with the Baltimore area, and never thought for a minute that KRNA would be heard in that area, PR is a funny entily. TJJ
IN WBCL	90.3	Fort Wayne- a personal letter from Mike Heuberger station manger FW
KS KTPK	106.9	Topaka- Patrick R. Christine, pro die sends a "Great American Country Club" decals & qsl, and mentions been heard on 6-20-75 in Warren, PA & South Plainfield, NJ. BFE
KY WJRS	103.1	Jamestown- Welby Hoover- scrawls cryptic verification letter BFE
WKYM	101.7	Monticello- Stephen Staples, owner & manager sends a letter BFE
MI WMUZ	103.5	Detroit-returned a Zerox copy of my report qsl'd from Doug E. Stone with a personal letter of verification too FW
MS WSJC	107.5	Magee-Larry Cockell send qsl of AM station with FM filled in TJJ
WNSL	100.3	Laurel- returned my report form with confirm over in red ink with rubber stamp QSL-WNSL also send a coverage map TJJ
MO KFMZ	98.1	Columbia- Jim Butler qsl on a messagegram says "Since we operate at 3kw erp at 300ft above terrain I must congratulate you on your success." TJJ
NJ WAVY	95.1	Atlantic City- Carl G. Monk, vp & gm says "we are more then happy to help you out." letter of verification TJJ
NY WHUD	100.7	Peekskill-Nathaniel Johnson with letter of qsl with 2 maps TJJ
NC WQMG	97.1	Greensboro-Allan C. Godwin, op dir.says that other reports at more distance, but mine first received since 1967 (!). BFE
OH WAUP	88.1	Akron- Don Boggs, station manager, verifies mentioning also reports from New Orleans & Canada. They are on 24 hours a day (school year only?) staffed with all volunteers. BFE
OH WCBE	90.5	Columbus- John H. Sittig, manager sends info "WCBE was the first school-board station to broadcast in stereo & the first school-board station to quility for Nation Public Radio." Heard in Denver Co in the early 1960's (by Marv Robbins?) BFE
WHBC	94.1	Canton- qsl card unsigned, but printed John Schen, CE for AM/FM/TV with FM noted, reply in 6 days KRS
WQOD	93.3	Youngstown- dittoed letter mentions Bruce Elving as Forest DX (Sorry Bruce, I beat you!) signed Yours Diringly Georgia (last part of name unreadable) (maybe George Dvepp CE ed.) KRS
OK KFNQ	101.9	Oklahoma City- Larry C. Stewart, CE WB5POW, letter & map TJJ
KCRC	96.9	Enid- Pat Murphy VP, says vertically polarized only (which can't be must be horizontally only) and claiming reception in Newfoundland as greatest distance. (for AM affiliate?) BFE
KCRC	96.9	Enid- Pat Murphy, VP says "Although your information is sketchy, we can confirm you probably did receive KCRC..." just great!!! letter and map in green typed letterhead paper in green type! TJJ
KMOD	97.5	Tulsa-colorfull form-letter verification from Robert E. Cauthon, CE TJJ

(continued on next page)

# TV QSL CORNER

PAUL D. TRASKA  
64 WEAVER AVENUE  
BUFFALO, NY 14206

WANTED: high & low band QSL's from the following states. CA both H&L-OR both H&L-AZ H-KS H-LA H-MO H-MN H-MS H-MT H-NE H-NV both H&L-NM both H&L-NC both H&L-ND both H&L-OK H-RI H-SC H-TN H-TX H-VA both H&L-WA H-WI H. also all CANADIAN high band. PS: if anyone has a QSL from ALASKA ?'thats right' we all would like to see it..(WHERE HAVE THE CONTRIBUTOR'S GONE) ??????

FL WTHS ch 2 Miami-p.o.box 610001,33161.L-Stephen L. Rogers VP for engineering & planning. 1 week. (JJA)  
WEAR ch 3 Pensacola-p.o. box 12278,32581.QSL & M, H.L. Singletarry, English Department. 11 days. (JJA)  
MO KYTV ch 3 Springfield-999 W.sunshine,65807.L-E.Pennis White CE. with, SASE. 1 week (JJA)  
OK KTVY ch 4 Oklahoma City-p.o.box 14068,73114.QSL in envelope, NO SIGNER.. 8 days (PDT)  
CANADA  
NF CJOX ch 2 Grand Bank,3 CJAP Argentia,4 CJCN Grand Falls,6 CJON St.Johns Newfoundland Broadcasting Company Limited,box 2020. four QSL's in envelope. John C. Tessier VP. 15 days (PDT)  
SK CKCK ch 2 Regina-box 2000,S4P 3E5.L-Alex White TD, 12 days (PDT)

CONTRIBUTOR'S: Jim J. Alexander, Lake Hiawatha NJ.

73's *Paul*

## FM QSL CORNER (continued from previous page)

AUGUST 1976

PA WBYO 107.5	Boyertown- Wilmer Borneman, CE, mentions also heard in Baton Rouge, LA & Clearwater, FL and sends elaborate program guide	BFE
WEZV 95.1	Bethlehem- QSL card with big letters, from Paul Galgon pro dir	TJY
SC WWBD 92.7	Bamberg- send a brief letter along with a survey from the afternoon soul show on there AM station "always a pleasure to hear from dx'ers. reply in 2-weeks from M. Payne Anderson, eng	SS
TX KOAX 105.3	Dallas- letter from Steve Keating, ce with a map and a go metric with KOAX thermometer post-card from Fahrenheit to Celsius. Also says "we just recently received a report from an individual in Plainfield, NJ."	TJY
KOUL 103.3	Sinton- (Corpus Christi) Ann Savoy "to be frank, some of our announcers didn't believe we were heard in Minnesota, until they read your letter."	BFE
KSIX 93.9	Corpus Christi- Charles R. Manning, commercial manager, extended an invitation to visit & expressed surprise at the reception	BFE
VA WXRI 105.3	Portsmouth- Randy Stafford, bookkeeper for Michael Meredith op man letter, 3 maps, and program guide and 3 bumper-stickers, the works.	TJY
WI WGBW 91.5	Green Bay- Annabelle L. Hitchcock, manager, verifies, promising a new program schedule in Oct 75 , which never came.	BFE

Well, that the biggest report I had yet. It was nice to get so many, but I got some more that will have to wait to next month, so don't worry if it is not in this one.

Reporters are: BFE-Bruce F. Elving of Duluth, MN using ?

FW--Frank Wheeler of Erie, PA using a Panasonic table radio RE-7329

KRS-Kenneth R. Simon of West Palm Beach, FL using a Harmon Kardon

SS--Scott Sampson of Orion, IL using a ?

TJY-Tom Yingling of Baltimore, MD (me) using a Pioneer TX-9100

So, I like to thank all those who send in reports. It looks good. If you could state the model of your FM receiver for the column so others will know what kind of radio did the trick. I guess that's all for now, and 73s and see you in Chicago!

*Tom*

# FM CCI

## UNIDENTIFIED FM-DX

Rod O'Connor  
P. O. Box 72  
Southwest Harbor ME  
04679

Greetings!

Several reports have come in during June so here goes ---

Ken Simon, 528 Pilgrim Rd., West Palm Beach, FL All times EDT  
June 4, Fri 1415 91.7 Es -- "public Radio 91" 91 plus unid NFR  
with slogan, only other E I could id was  
KXCV Marysville MO, faded rapidly.  
((suspect KRIA Columbia MO/KCMW Warrensburg MO - rec))

Frank Wheeler, Erie PA, EDT  
May 27, Thur 0245 103.9 Tr -- WWIZ FM 104, suspected Ohio or Mich.  
((You heard WWIZ FM 103.9, Mercer PA-rec))

Jim Pizzi, 300 Park, Circutt CA, all times PDT  
June 14, Mon 1653 91.5 Es -- Slack Accent KITC?? ((The only one I could  
find closely resembling was KICC, International Falls, MN - 10 Watts! - rec))  
1709 91.3 Es -- Female Announcer KBIO, KDIO, KEIO??  
((Could it be same as Ken's above? KBIA? - rec))  
1717 95.9 Es -- Female chorus singing "KNEY or KMEY Rock"  
PTA Kansas, Okla, N. Texas (( I would suspect  
KRBB FM Salisaw OK, they might have changed  
call sign, although unable to confirm-yet-rec))  
June 20, Sun 0146 88.3 Tr -- Simulcast for KPPA 94.1 San Francisco PTA  
San Joaquin Valley, CA.

Peter Sawatsky, 244 Neilson Ave., Waterloo, Ontario, Canada N2J 2M3 Times EDT  
Sep 6, 75 Sat 0800-1300 93.5 Ms -- heard ..." to this week's King Biscuit  
Flower hour special, James Taylor live  
at Carnegie Hall, starting ..."  
Sep 13, 75 Sat 0100-0700 103.7 Ms -- A spot for Nolan's auto Audio on 2001  
West Morgan.  
Oct 22, 75 Wed Time unk 93.3 Ms -- "The beginning of an enriching experience... computer date, 394-3038..."  
Nov 13, 75 Thu Time unk 97.7 Ms -- "WFGE...rock Harrigan with the sweet  
rock and fox on the run. Hi, this is  
Steven in the morning with a great  
Christmas gift-giving idea from Reynold's Drug Store, Morgan Ave at Andrew."  
ID sounded clear on tape but no WFGE  
seems to exist.  
Nov 28, 75 Sat Btwn01-0800 101.9 Ms -- heard either ..MFC weather.." or NFC  
weather or MF or NF Sea weather WFMJ??  
((WMFJ likely Daytona FL-marine areas.rec))  
Nov 29, 75 Sun Time unk 97.7 Ms or Tr -- "...this is 97.7 W?? last letters  
sounded like RD. Only fit is WURD  
Georgetown OH, are they stereo??  
Dec 13, 75 Sat 2125 94.3 Ms -- Heard "astronodo in Sandersville for times  
and days.." No apparent 94.3 sta. nr Sanders-  
ville GA or MS ((Checked Sandoval IL,no luck rec))  
Dec 22, 75 Mon 1228 90.1 Ms -- Heard "...Fairmont..Manhattan.. call 742-..."  
Remarks- WRFN Ripon WI only one which checks  
out for tel#, but 10 watts!!! ((maybe more rec))  
May 5 76 Wed 1200 94.5 Es -- PTA OK, TX, NM Heard spot for Pollard Ford in  
Indiana TX: Spot for Univ. Ctr. theatre (742-1251)  
KOBK Album giveaway. No sta seems to exist.  
((Agree, checked all back VUP 75/76 with neg. rec))  
Jun 3 76 Thu Btwn08-1700 93.5 Ms -- Heard "...heritage station, W2?T 93.5 mhz"  
Probably WXMT, WHJT or WITT but which is  
"Heritage"??" Happy Tuning,

*Rod*

# TV CCI

## UNIDENTIFIED TV-DX

Frank Aden, Jr.  
1535 NW Ithaca Ave.  
Bend OR 97701

AUGUST 1976

With some stroke of luck I was able to compile a complete set of TV GUIDES last month. I no longer need any of the listed editions in the May TV-CCI. A few new editions are now out. The Pittsburgh edition has been split into three editions. The new Pittsburgh Metro edition contains schedules for: KDKA2, WTAE4, WIIC11, WQED13, WPGH53, WFMJ21, WKBN27, WTV33, WSTV9, WJAC6, WTRF7 & WTAJ10. The new Wheeling-Steubenville edition contains WTRF7, WDTV5, WCHS8, WSTV9, WFMJ21, WKBN27, WTV33, WBOY12, KDKA2, WTAE4, WIIC11, WQED13, WPGH53 & WJAC6. The new Johnstown-Altoona edition contains WJAC6, WJNL19, WTAJ10, WOPC38, WFSX3, KDKA2, WTAE4, WIIC11, WQED13, WPGH53, WNEP16, WDAU22, WBRE28, WNEW5, WOR9, WPIX11, WGAL8 & WHP21.

Use WHS for Wheeling-Steubenville edition, JAL for Johnstown-Altoona edition and PGH (same as before) for Pittsburgh Metro edition.

The Vermont edition which was released a few months back contains schedules for WCAX3, WEZF22, WETK33, WETZ5, WMTW8, CJCH13, CEMT6, CFCF12, WBZ4, WMUR9, WNEW5, WPIX11, WRGB6, WNNY7, WAST13 & TVA NETWORK (FRENCH PROGRAMMING) STATIONS CHLT7, CFIM10 (but not for TVA STATION CFVO30). It can be found listed in TV HEBDO.

Schedules for new KPRY4, Pierre, SD (NBC, Sat. of KSFY13) can be found in the Nebraska edition.

KXLY4, Spokane, WA will lose CBS Oct. 1. The station lost the CBS contract which will go to KREM2. KXLY is expected to pick up ABC from KREM unless it can get NBC to drop KHQ6.

Pat Martin, PO BOX 14192, Portland, OR 97214 (1976 unids)  
Wed Jun 16 Es ch 4 1825 PDT--"F Troop". PTA: Antenna pointed east. Nothing checks in any of the TV GUIDE editions for US and Canada. Other TV schedule guides are also negative (FEA).

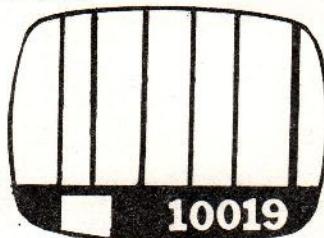
Frank Wheeler, 6589 Wattsburgh Rd., Erie, PA 16509 (1976 unids)  
Wed May 26 Es ch 4 1312 EDT--KPRY.....S.D. Weather, Rains, eastern S.D. Picture "A look ahead KPRY 4 TV". KPRY is the new NBC station in Pierre, SD. A sat. of KSFY (FEA).  
 1316 EDT--KSFY TV. Somewhere in SD. This is KPRY again when they let slip a KSFY ID. I have seen them do this myself (FEA).

Michael Hogan, 4811 Euclid Ave., East Chicago, IN 46312 (1976 unids)  
Sun Jun 6 Es ch 4 1800 CDT--Station with program about tennis tips. PTA: W or SW. Nothing checks in any of the Western or SW TV GUIDE Editions (FEA).

Scott Sampson, 1025 14th Ave. A. Orton, IL 61273 (1976 unids)  
Wed May 26 Es ch 2 1300 CDT--ID slide that looks like CKBQ. This is CKBQ in Melfort SK. I have seen their ids many times and the ids they use have the K shaped almost like an H (FEA).  
Mon Jun 7 Es ch 2 1430 CDT--"KSN" ID. On id was a big three to the right of a picture of a female. Mentioned "Newscenter 3". Network was NBC.  
KANSAS STATE NETWORK This is KCKT. A member of the Kansas State Network whose flagship station is KARD. They ID as "KSN", sometimes not giving local calls.  
Tue Jun 8 Es ch 2 1202 CDT--Slide with "itv" came out of nowhere overpowering semi-local WMT2. Reception only lasted 30 seconds. A brief bit of animated programming which appeared to be educational. Antenna SSE. Cuba?

Jim Pizzi, Orcutt, CA 93454 (1976 unids)  
 Mon Jun 21 Es ch 2 1407 PDT--"Flintstones" KMID/KPRC? KMID checks(FEA).  
 ch 2 1420 PDT--"Dinah Shore" KPRC/WBRZ? WBRZ checks(FEA).  
 ch 2 1440 PDT--"Sesame St" fea. letter W at 1452. Letter G at 1455.  
 WMAB/WDIQ/KETS? KETS checks, WMAB checks, WDIQ checks.  
 Members with TV GUIDES for Jun 21 please check to see  
 which station featured W and G(FEA).  
 ch 2 1458 PDT--End of FHI. At 1459 mentioned Atlanta. At 1500 Action  
 news. 1501 Live? Police action report. WSB? WSB has  
 the FHI from 1400 to 1500 PDT. News at 1500 PDT. This  
 is probably it(FEA).  
 ch 2 1502 PDT--News report on beach area (Action news may go with this  
 as both were in together) WESH/WCBD?  
 ch 2 1858 PDT--Under KCKT, offset to KCKT with Gene Tuck.  
 WBRZ was logged at 1429 with ads, ID, Sanford & Son. Most believed to be 2Es.

Randy Dorman, 8113 Spaulding Cir., Severn, MD (1976 unids)  
 Wed Jun 16 Es ch 6 2030 EDT--Cuba. Man showing girl how to use gun. Woman was  
 speaking. At 2000 "Album de Cuba". At 2030 ID given,  
 see picture. CMQ or CMJL?  
 , Sun Jun 6 Es ch 3 2030 EDT--PBS station. Antenna South. WEDU? TV GUIDE lists WEDU  
 on to 2300 EDT. Appears to be only possibility to south  
 (FEA).  
 ch 3 2000 EDT--Received station running "Six Million Dollar Man"  
 This is the regular time slot for this program so too  
 many possibilities. Local details would be needed for  
 identification (FEA).



Frank Aden, Jr., 1535 NW Ithaca Ave., Bend OR 97701 (1976 unids)  
 Tue Jun 10 Es ch 3 1008 CDT--CB with digital readout at bottom right corner.  
 KENW3, KCKT2, KTWS3 & CKCK2 were all seen between  
 1000 and 1030. KLINE should have been already on air  
 with programming. KENW CB has been seen here before  
 and is not like this one. Who would be signing on at  
 1030 or 1100? TV GUIDES list all 3s as being already  
 in programming. See picture above.  
 Thu Jul 8 Es ch 4 1844 PDT--"Batman". Could have been one of the movies instead of  
 the series. TV GUIDE editions have all been negative.  
 Stations in NM and OK were seen at same time.

Paul Gaines, C. P. Cleaning, 15920 Puritan St., Detroit, MI 48227 (1975 and 1976 unids)  
 Wed Jun 18 Es ch. 5 1340 EDT--CBS station. At 1400 midday local news called "the five  
 point news. Stations were in from Fla., Neb., & Wyo.  
 (Repeated from Oct. 75 TV-CCI by request). Not KYCU,  
 KEXX, or KSL. KFBB/KXGN? Efforts to ID this one have  
 so far failed. Please check last years TV GUIDES for  
 this one (FEA).  
 Sun Jun 27 Es ch 3 0022 CDT--End of "Night Owl Matinee". Faded in for NA "God Save  
 the Queen" or "My country tis of thee". GSTQ (British  
 NA) is ran on some Canadian Stations after "O Canada"  
 (FEA). A 3/4 CB-TF was then shown. White lower left  
 bottom 1 1/2 size. Antenna SSW. Not CKVR. Another station  
 was under this one and had an ad for "Studs Beer".

Paul Gaines Continued.

"The beer that made Boise famous". Not Boise as there have not been any breweries in Boise for many years. May have been something that sounded like Boise. Boise is pronounced with an C not Z. "BOY CE"(FEA). Probably a Canadian coming through tail end of antenna.

Es ch 3 1300 EDT--"Focus" Seen a few times. Has to be A Texas station as KACB usually takes it over. Host is Don Alexander. Sheridan and Lampass mentioned. This is KFDX as TV GUIDE lists it as having "Focus" at this time (FEA).



Rod O'Connor, Box 72, Southwest Harbor, ME 04679 (1976 unids)

Mon Jun 21 ch 4 Es 1814 EDT--CBS station with "Stan Piekarski" being interviewed. Piekarski is running for state rep. Any idea of what state this is?

REGIONAL TV NETWORKS CONTINUED

## GREAT WEST TELEVISION CKPG-TV

Channel	2—Prince George
	6—Vanderhoof
	5—Ft. St. James
	6—Fraser Lake
	6—Ft. Fraser
	6—Endako
	10—Hixon
	13—Quesnel
	6—Mackenzie
	9—East Georgia
	7—Telkwa
	9—Hazelton
	13—Kitwanga
	11—Stewart
	7—Alice Arm
	11—King Island
	7—Bella Coola
	9—Hagensborg
	11—Tasu
	4—Queen Charlotte City
	8—Masset
	9—Shoulder Mountain
	6—Granisle
	4—Pearse Island
	12—Mount Wells

CBC TV IN NORTHERN  
BRITISH COLUMBIA



KHGI-TV 13  
Nebraska Television Network  
Kearney, Nebraska 68847  
telephone (308) 743-2494



"MID CANADA SYSTEM"  
CHNB ch. 4 North Bay  
CFCL ch. 6 Timmins  
CKNC ch. 9 Sudbury  
ch. 2 Kirkland Lake  
ch. 2 Kapuskasing  
ch. 4 Hearst  
ch. 5 Amos/Val D'OR. PQ  
ch. 7 Chapleau  
ch. 7 Elliot Lake  
ch. 8 Moosonee  
  
CBC in Ontario

## CFTK-TV

12—Gribbell Island	Channel 3—Terrace-Kitimat
2—Klemtu	6—Prince Rupert
9—Bella Bella	5—Smithers
9—Lalakata Point	2—Houston
13—South Bentinck Arm	4—Burns Lake

5—Kildala  
2—Kemano  
2—Justkatla  
7—Nass Valley  
2—Ocean Falls  
5—Aristazabal Is.  
8—Annette, U.S.A.  
5—C.A.S. Ketchikan

NEBRASKA TV NETWORK (ABC)

KHGI-TV Channel 13  
Kearney-Hastings-Grand Island  
KCNA-TV Channel 8  
Columbus-Norfolk-Albion  
KWNB-TV Channel 6  
North Platte-McCook-Hayes Center  
KSNB-TV Channel 4  
Superior  
Northern Kansas-SE Nebraska



The NTV Network is a group of interconnected television stations serving the richest agricultural market in the world—Nebraska, northern Kansas and eastern Colorado. With four full-power VHF stations and four tall towers, NTV covers 98 counties in these three states—a market of 315,000 television homes in this booming, rich agribusiness market. The NTV Network's full color VHF signal reaches over 750 well-heeled towns and 8 prosperous cities of over 20,000 each. Plus NTV is carried on cable in dozens of other communities and in 18,000 of the wealthiest homes in the state capital of Lincoln.

Andy Bollin, Editor  
709 Lincoln Ave.  
Charleston, Illinois  
61920  
Tele. 217-345-5778  
\* MUST update by October 1

30

**Andy Bolin**, Editor  
709 Lincoln Ave.  
Charleston, Illinois  
61920  
**Tele.** 217-345-5778  
\* **MUST** update by October 1

AUGUST 1976

Some confusion has come up over the definition of 88-92 due to an error in the last Scoreboard stations logged from 88.0 to 91.99 whether it's in the US or not, and whether it's commercial (i.e. CJOM/ZBM) or

**CHANGE!** From now on any DXer who has moved, or become inactive can have his totals permanently listed! All you need do is put under the "AS OF" heading the word inactive, and that will get you permanently listed! Unless you have extremely high totals, please only one inactive listing per DXer. This means no change for active DXers. You still must update once a year or be dropped.

TIT

Anak

# VHF UTILITY DX

Pat Dyer  
5315 Silvertip Drive  
San Antonio, TX 78228  
Deadline: 10th of month

AUGUST 1976

Hank Holbrook, 7211 Chestnut St., Chevy Chase, MD 20015 GMT, QSLed

3-14: 1508, N5293Q 119.7 ov Severna Park, MD (Flight Training, Inc.; Cessna 150L; 1700 feet)  
4-25: 2106, N4622 134.0 vic NYC (National, Boeing 727-35)  
26: 1448, N1863T 127.1 vic Salisbury, MD (Westinghouse Electric Corp.; Sabreliner N265; 2-eng, 6-seat; 5500 ft)

Martin J. Theil, 12 Princeton Dr. E., Holiday, FL 33589 (934-5843)

Bearcat 101 scanner with rod antenna - June

KTO 500	Lakeland, FL	KIB 660	Tampa, FL
KAA 522	Willow Spgs., MO	KIA 653	Tampa, FL (fire)
KAA 203	Kirkwood, MO	KYE 234	Tampa, FL (beverage)
KEQ 213	Grand Rapids, MI	KAG 793	Belmond, IA
KAA 201	Jefferson, MO	KAA 958	Rolla, MO
KDZ 422	Pasco Co., FL	-	Scranton, PA 35.58 pgr
KIB 480	Lakeland, FL	mobile phones:	
KIB 662	Pasco Co., FL	35.42	Columbus, OH
KAA 202	Lees Summitt, MO	35.26	Detroit, MI
KSB 926	Shelbyville, IL	35.26	Philadelphia, PA

good results considering Ch 10 only 2 blocks away. Would like to hear from members about indoor antennas and noise filters for scanners

Now, my loggings. Allied A-2586, Hallicrafters SX-62, Hammarlund SP-600 JX-10, two 30' long wires at 12' (ne-sw and nw-se runs); except as noted, all are Es (2Es-double hop); tr-tropo; new underlined; GMT used

<u>6-11:</u> 1538, KMA 829	20: 1928, S Diego-a	21: 1607, KAD 308
1539, KPL 943	2009, KME 438	KAD 761
1812, S Diego-b	2025, L Ang-a	<u>22:</u> 0325, KMA 829
1828, L Ang-a	<u>21:</u> 0437, KAE 697	1915, KIF 651
<u>13:</u> 1950, KL7IBG (2Es)	0439, KAB 490	KIE 953
<u>15:</u> 1610, S Diego-a	KAA 486	1935, KQC 884
<u>17:</u> 1515, KOE 257	0440, KAB 574	1955, L Ang-a
1825, KAD 756	KAP 228	2316, KQI 316
1831, KAD 761	0456, KAB 468	<u>25:</u> 0948, KSA 877
1839, KAE 869	KAA 241	1000, KSA 994
1840, KAA 585	0611, KQC 884	<u>26:</u> 0531, KIF 651
KAB 223	0724, KEU 928	1657, OK City
1852, KAD 447	0727, KGT 462	<u>27:</u> 0754, KKI 445 (tr)
1855, KBW 426	0736, KAA 860	<u>1-3:</u> 2325, S Diego-a
1856, KAA 521	1528, KAD 505	<u>6:</u> 1530, S Diego-a
<u>20:</u> 0318, KIE 953	KAD 471	1539, KSC 645
0530, KPL 943	1535, KAD 472	<u>7:</u> 1949, KQC 877
0645, KOE 257	1543, KAA 979	1950, Cleveland
0822, KAA 948	1551, KAB 233	2002, KQI 316
0834, KAA 474	1554, KAA 441	<u>8:</u> 1732, KUA 288(2Es)
0843, KSC 770	1557, KQL 757	<u>9:</u> 0306, L Ang-b
KSB 220	1603, KRE 460	0312, KME 438
1754, KSC 645	1604, KBX 623	
1825, KIF 651	1605, KAA 985	

50-MHz logging with Swan 250, Ameco nuvistor preamplifier, 3-element horizontal CushCraft beam at 18'.

2Es on 50-MHz noted on 15 days in June - 4, 6, 9, 11, 12, 13, 16, 18, 19, 20, 21, 24, 26, 27, 28; and July 3, 4, 7, 8.

AUGUST 1976

KAA 241	37.10	Nevada, IA-cp	KEU 928	37.10	Cedar Rapids, IA-cp
KAA 441	37.10	Sidney, IA-cp	KFL 943	35.58	Las Vegas, NV *
KAA 474	37.10	Washington, IA-cp	KGT 462	37.10	Johnson Co., IA-cp
KAA 486	37.10	Sigourney, IA-cp	KIE 953	35.58	Atlanta, GA
KAA 521	37.10	Spencer, IA-cp	KIF 651	35.58	Ft Lauderdale, FL
KAA 585	37.10	Marshalltown, IA-cp	KKI 445	35.58	Houston, TX
KAA 860	37.10	Grundy Center, IA-cp	KMA 829	35.58	San Diego, CA
KAA 948	37.10	Clinton, IA-p	KME 438	35.22	Orange, CA
KAA 979	37.10	Oskaloosa, IA-p	KOE 257	35.22	Phoenix, AZ
KAA 985	37.10	Marshalltown, IA-p	KQC 877	35.58	Cincinnati, OH
KAB 223	37.10	Newton, IA-p	KQC 884	35.58	Detroit, MI
KAB 233	37.10	Clorinda, IA-cp	KQI 316	33.90	Cincinnati, OH-f
KAB 468	37.10	Albia, IA-p	KQL 757	37.10	Monona, IA-p
KAB 490	37.10	Oelwein, IA-p	KRB 460	37.10	Alta, IA-p
KAB 574	37.10	Marengo, IA-cp	KSA 877	39.50	Princeton, IL-cp
KAD 308	37.10	New Hampton, IA-cp	KSA 994	39.50	Pekin, IL-cp
KAD 447	37.10	Bloomfield, IA-cp	KSB 220	39.50	Eureka, IL-cp
KAD 471	37.10	Mt Pleasant, IA-cp	KSC 645	35.58	Chicago, IL
KAD 472	37.10	Osceola, IA-cp	KSC 770	39.50	Toledo, IL-cp
KAD 505	37.10	Garner, IA-cp	KUA 288	35.22	Portland, OR
KAD 756	37.10	Waterloo, IA-cp	-	35.42	Cleveland, OH-mp
KAD 761	37.10	Onawa, IA-cp	-	a-35.38	Los Angeles, CA-mp
KAE 697	37.10	Anamosa, IA-cp	b-35.46	"	
KAE 869	37.10	Ida Grove, IA-cp	-	35.58	OK City, OK **
KAF 228	37.10	Manchester, IA-cp	-	a-35.38	San Diego, CA-mp
KBW 426	37.10	Missouri Val., IA-p	b-35.46	"	
KBX 623	37.10	Spirit Lake, IA-p	KL7IBG	50.103	Ketchikan, AK-a

a-amateur, cp-sheriff, f-fire, mp-mobile phone, p-police  
 rest are pagers, tone, except \* tone message/voice ID and \*\* voice  
 messages and ID

-----  
 Effective July 1 WWV is no longer broadcasting the Geophysical Alerts  
 at 18 minutes after the hour. They are still giving the propagation  
 conditions/forecast etc at 14 minutes after. Thus we can no longer  
 obtain advance warning of possible flares, magnetic storms, etc.

The Weekly Solar Bulletin from Boulder is now disclosing a larger amount  
 of new Cycle (Cycle 21) active regions. As they occur at higher solar  
 latitudes (i.e., more distant from the solar equator), they are easily  
 noted among the Cycle 20 regions that virtually hug the equator now.  
 However, Swiss forecasts still have the smoothed numbers going down  
 as of October.

#### Ottawa 10.7-cm solar flux/Boulder A-Index

May 1, 76/8; 2, 73/22; 3, 71/58; 4, 70/20; 5, 70/10; 6, 69/12; 7, 69/8;  
 8, 69/11; 9, 69/5; 10, 71/5; 11, 71/10; 12, 71/8; 13, 72/4; 14, 73/4;  
 15, 75/3; 16, 77/4; 17, 75/4; 18, 75/2; 19, 72/8; 20, 71/14; 21, 72/10;  
 22, 71/10; 23, 70/11; 24, 69/8; 25, 68/10; 26, 68/6; 27, 68/6; 28, 67/18;  
 29, 66/17; 30, 66/16; 31, 66/9 avg.: 70.6

Jun 1, 67/6; 2, 66/6; 3, 66/7; 4, 66/20; 5, 67/18; 6, 67/9; 7, 67/11;  
 8, 69/10; 9, 68/6; 10, 69/5; 11, 69/25; 12, 70.9; 13, 70/6; 14, 71/5;  
 15, 72/3; 16, 75/8; 17, 75/14; 18, 75/20; 19, 74/8; 20, 74/6; 21, 75/4;  
 22, 76/3; 23, 74/4; 24, 73/11; 25, 72/14; 26, 72/5; 27, 70/8; 28, 69/6;  
 29, 69/9; 30, 68/- avg.: 70.5

The magnetic storm of early May is very evident in the above.

73, Pat WA5IYX

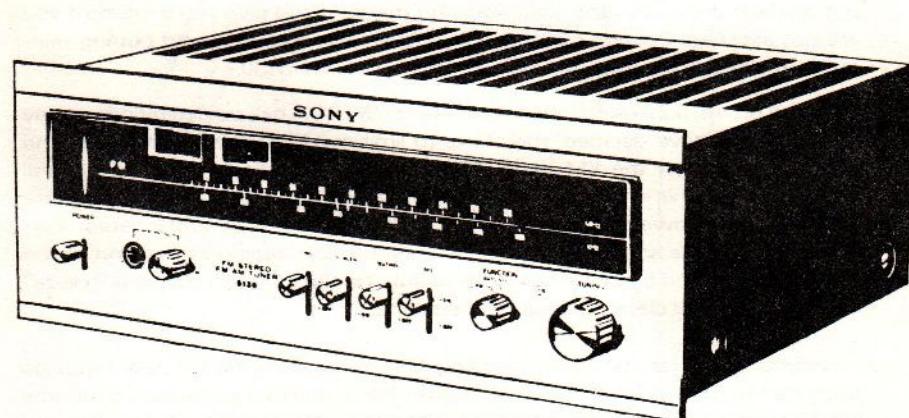
SIX MONTH PROGRESS REPORT

ON

FM DXING WITH THE SONY ST-5130 FM TUNER

BY

PETER OPRISKO



This article is an updated and expanded version of a basic article which originally appeared in the April, 1976 VUD. Portions of the original article have been retained and repeated, to accommodate the WTFDA Reprint Service.

DXing Low-powered Educational FM Stations  
by  
Peter Oprisko

Last July I decided to get into FM DXing. Hopefully, relating my introduction to the hobby will save others time and money and, perhaps, serve as a guide for novices, neophites, and newcomers. Being strictly interested in results, I wanted to buy the best available state-of-the-art equipment, regardless of cost. I was led to believe the \$2,600 Sequerra Model 1 would fill my needs; and had taken preliminary steps to have one built for me. The day before I was to go to the bank and withdraw the money I phoned Morrie Goldman. He advised me to "A-B" compare and consider several other tuners. He suggested I try the Sony ST-5130, Pioneer TX-9100, and Kenwood KT-8007. Needless to say, I'm glad I took his advice. However, I also carried his suggestion a step further by including the McIntosh MR-78, Yamaha CT-7000, and Sansui TU-9000. If I've learned anything from these comparisons, it is that there is no relationship between the cost of a tuner and its DXing capabilities.

I found that most dealers will permit you to try a tuner for several days if you put up the money, with the understanding that they will give you a refund if you are not satisfied. Several months later, after much shopping and putting hundreds of miles on my car, I decided to buy the Sony ST-5130.

Taking on the publishing responsibilities for WTFDA has put limitations on my leisure time. I have decided, therefore, to limit my FM DXing activities to the educational end of the FM band (88-92 MHz). Accordingly, there is general agreement that this is the most difficult part of the FM band to DX. This is where so many low-powered, elusive, and hard-to-log stations are located. Furthermore, there is speculation that changes may be coming at this end of the band. As predicted by Bruce Elving, as of July 1st the FCC has placed a "freeze" on the licensing of class D educational stations.

Unfortunately, far too many budding DXers lose interest as new loggings become few and far between. The results I have obtained in the past 6 months have convinced me that it is entirely possible for a DXer to start with good equipment and log 100 educational band stations in one year's time. I acknowledge, though, that it wouldn't be easy. Actually, it would be quite an accomplishment -- no one has ever done it!.

I started FM DXing on New Year's Day. Here are the results: In my first 25 days I logged 50 educational band stations; many of them were flea-powered 10-watters. After four months my log was up to 62 educational band stations, a level of accomplishment that usually takes about three years. And now, after only six and a half months, my log is at 88 educational band stations. This is a level of accomplishment that previously was not usually attained in less than five years! I have logged at least one station on each frequency, and as many as nine stations on some frequencies. These educational stations cover 12 states and 1 Canadian Province. I might hasten to point out that most of this was accomplished under the handicap of "dead-band" mid-winter conditions. Also, I have just begun to experience what farther distant stations can be received via tropo and E-skip propagations. For example, a recent morning tropo session brought in WVWR 89.1 in Roanoke, Virginia, a distance of over 500 miles. And during recent E-skip openings, I received WMHU 89.7 in Miami, Florida (1100 miles) and KTEP 88.5 in El Paso, Texas (1500 miles).

Good adjacent channel selectivity is also one of the most important parameters to successful FM DXing. Moreover, adjacent channel selectivity is generally considered to be the "acid test" of a good DXing tuner. Without it, a DXer limits his opportunities by not having access to all of the 100 available FM channels. It is important to be aware that good adjacent channel selectivity, however, does not necessarily go hand-in-hand with good alternate channel selectivity. Unfortunately, very few manufacturers publish this important specification. Remember, FM tuners are not designed for DXers; they are designed for audiophiles. Incidentally, adjacent channel selectivity has become a common stumbling block of many of the audiophile's so-called "supertuners". I've tried them. They are great for sound reproduction but, with few exceptions, are usually only mediocre in station catching ability.

A word about the ST-5130's selectivity is in order. As stated previously, I have decided to limit my DXing to the educational end of the FM band. However, educational stations are generally not as powerful as commercial stations and, consequently, present a greater challenge to FM DXers. This end of the band becomes even more challenging when you realize that my strongest local station, WYCA, is only 3 air miles away! To make my situation even worse WYCA's frequency is only 300 kHz away from the educational band. WYCA, Hammond, Indiana, blasts out 30,000 watts on 92.3 MHz 24 hours a day, seven days a week, with no silent period, creating what could be a DXer's nightmare. Such a situation would be a challenge to any tuner's selectivity and immunity to cross-modulation. Nevertheless, despite such handicapping circumstances, the adjacent channel (92.1 MHz) has become one of my best DX frequencies. On it I have logged no less than nine 3,000-watt stations and have no problem pulling in most of them on a daily basis. Bear in mind that these stations have only 1/10th the power of WYCA and are all being received via extended groundwave propagation. Out of curiosity, I calculated the average distance of these stations. It turned out to be approximately 130 miles. This is 6 times their average primary coverage distance. One of these nine stations is WJRE in Kewanee, Illinois, 135 miles away. Incredibly, to pick it up, I must face my antenna almost directly at WYCA's tower! Such superlative performance clearly illustrates the ST-5130's superior ability to cope with adjacent channel stations.

Although the ST-5130 has many good features, I would feel remiss if I didn't mention the defeatable AFC switch and the Impulse Noise Suppressor. I personally have experienced times when defeating the AFC combined with careful tuning has made the difference, between having and not having a station. Once you have DXed using defeatable AFC, I doubt that you will want it any other way. As for the INS feature, all I can say is that it works surprisingly well.

When you study and compare the ST-5130's specifications with those of other tuners, remember that they are the absolute minimum to permit the unit to leave the production line. Therefore, actual performance can be relied upon to exceed the levels indicated. It appears that Sony engineers, attempting to create a top-of-the-line tuner for audiophiles, have inadvertently catered to the needs of FM DXers by successfully combining extreme sensitivity with excellent selectivity and immunity to cross-modulation. Now you can understand how I have been able to log so many low-powered educational stations in such a short period of time since I purchased the Sony ST-5130 tuner. From a serious DXer's point of view, for its price, it is an extraordinary value.

Of the 88 total educational band stations in my log no fewer than 20 are those difficult class D 10-watters. Only about a dozen Fm DXers have ever logged 20 or more 10-watt educational stations. The primary coverage distance of these much-sought-after stations is considered to be only 4 miles. Because of the relative difficulty in capturing these ubiquitous midgets many FM DXers consider them to be among their most prized loggings. I believe, with proper equipment, these elusive, hard-to-get stations can become the pride of any FM DXer's log. Interestingly, even when Bruce Elving became the first person in history to log 1000 FM stations, only 4 of them were class D 10-watters. Although E-skip reception of 10-watt educational stations is reported from time to time, grappling successfully with such low-powered stations requires top-notch equipment. With the ST-5130 I am able to use a hundred-mile 10-watter in Kalamazoo, Michigan as a "check station" to help me determine daily changes of atmospheric conditions.

To excell a good antenna should be the foundation of any successful DXing set-up. My antenna is neither sophisticated, elaborate, nor exotic; however, it is adequate. I am using a single Channel Master Probe 9 (Model 4408) horizontally mounted at 60 feet on a Rohn 20-G tower, turned by a Cornell-Dubilier AR-40 rotor and Belden 8285 300 ohm lead-in. (No traps, no booster) I chose the Probe 9 because there is a general consensus among many successful FM DXers that its flat response, high front-to-back ratios, and outstanding directivity make it probably the best commercially available FM DXing antenna on the market today. Channel Master categorizes the Probe 9 as a series-fed, folded dipole array.

On February 2nd, 1976 a tuner clinic was conducted by Yamaha in nearby Hammond, Indiana. The results proved to be somewhat embarrassing when my ST-5130 out-performed the \$1,200 Yamaha CT-7000 and Sequerra Model 1 in several important categories. More recently, I was given a week's use of the \$1,250 S.A.E. Mark VI B. This tuner reputedly has the industry's highest alternate channel selectivity rating -- 140 dB! Surely, I thought, here was tuner that would our-perform the \$250 Sony; and, indeed, I was fully prepared to purchase it. However, such was not to be the case. The ST-5130, with an I.F. section having eight solid state ceramic filters, met the challenge handily. With all due respect, let me say that I consider the Mark VI B to be the second best tuner I have ever used. Its alternate channel selectivity was excellent as might be expected. However, its adjacent channel selectivity and sensitivity performances did not quite match the ST-5130. This should not be surprising in view of the fact that ceramic filters have gained a reputation for having steeper skirt characteristics than crystal or lattice-crystal filters. The results of this comparison seemed so astonishing that I invited other DXers in the area to come and hear for themselves. They too were convinced.

It is worthy to note that Sony, as a matter of company policy, is conservative in publishing specifications. For instance, the owner's manual states sensitivity to be 1.2 microvolts at 30 dB of quieting. Beside being checked at the tuner clinic I had it checked at Sony in Niles, Illinois and the actual sensitivity turned out to be 0.8 microvolts for 30 dB. (Lower is better) Educational stations 250 to 300 miles away are heard daily, the year around. It goes without saying that good sensitivity is extremely important to DXing success.

# TECHNICAL SPECIFICATIONS

**Fm Tuner Section**

Tuning range	87.5 MHz - 108 MHz
Antenna terminals	300 ohms balanced 75 ohms unbalanced
Intermediate frequency	10.7 MHz
Sensitivity	1.5 μV. IHF 1.2 μV. S/N=30 dB
Image rejection	100 dB
I-f rejection	100 dB
Spurious rejection	100 dB
A-m suppression	60 dB
Capture ratio	1 dB
Selectivity	100 dB
Signal to noise ratio	75 dB
Frequency response	20 Hz - 15 kHz ±1 dB
Harmonic distortion	Mono 0.2% Stereo 0.3% at 400 Hz, 100% modulation
Stereo separation	42 dB at 400 Hz
30 kHz, 38 kHz suppression	60 dB
SCA suppression	55 dB
Muting level	Less than 5 mV

**General**

Outputs	FIXED 750 mV, 10 kohm impedance VARIABLE 0.2 volts, 1.8 kohm impedance
System	MULTIPATH (VERTICAL/HORIZONTAL) TAL) 150 mV, 18 kohm impedance
Semiconductors	4 FET, 22 transistors for reception 5 FET, 26 transistors for auxiliary circuits 41 diodes
Power requirements	120 volts, 50 Hz/60 Hz ac
Power consumption	25 watts
Dimensions	15 1/4 (w) x 5 1/4 (h) x 13 3/4 (d) inches
Weight	16 lb 8 oz (net) 22 lb 4 oz (in shipping carton)
Supplied accessories	Fm ribbon antenna (1) Connecting cord RK-74 (1) Polishing cloth (1) 75 ohm cable connector (1)

## Circuitry and Performance Highlights

**A-m Tuner Section**

Tuning range	530 kHz - 1,605 kHz
Antenna	Built-in ferrite bar antenna and external antenna terminal
Intermediate frequency	455 kHz
Sensitivity	50 dB/m, built-in antenna 20 μV, external antenna
Signal to noise ratio	50 dB
Image rejection	45 dB at 1,000 kHz
I-f rejection	41 dB at 1,000 kHz
Harmonic distortion	0.6%

Sensitivity, interference rejection, and other vital factors which affect the quality of a tuner are greatly determined by the characteristics of the front end. The front end of the ST-5130 has MOS FET's in the mixer and r.f. stages, thus it achieves exceptionally high sensitivity, overload capability, image rejection, superior cross-modulation rejection, and low internal noise. The ST-5130 delivers clean audio output even if the unit is operated near a powerful transmitter, or receives very weak stations in distant fringe areas.

The fm i.f. section has eight solid-state filters (which are permanently aligned ceramic filters) to contribute to the tuner's selectivity and long-term stability. The solid-state filters permit reception of weak signals without interference from strong adjacent stations.

Frequency	88.1	88.3	88.5	88.7	88.9	89.1	89.3	89.5	89.7	89.9
Stations	8	9	7	5	7	3	4	5	5	1
10-watters	5	3	5	2	2	1	1	1	0	0
States	3	4	3	4	5	3	3	4	4	1

Frequency	90.1	90.3	90.5	90.7	90.9	91.1	91.3	91.5	91.7	91.9
Stations	4	2	2	2	5	6	5	2	3	5
10-watters	0	0	0	0	0	0	0	0	0	0
States	4	2	2	2	5	4	5	2	2	2

(The above chart shows the number of stations, 10-watters, and states logged on each of the educational band's 20 channels. As mentioned previously in this feature, local WYCA operates with 30,000 watts on 92.3 MHz; nevertheless, on the adjacent channel (92.1 MHz) I have been able to log 9 stations representing four states, averaging to a distance of 130 miles! This fact attests to the ST-5130's remarkable selectivity.)

# Tuners

## COMPARATIVE SPECIFICATIONS FOR LEADING FM MODELS

MANUFACTURER	MODEL	SPECIFICATIONS												NOTES
		AM	FM	SWR	IF	IFP	IFP	IFP	IFP	IFP	IFP	IFP	IFP	
HEATH	AJ1510	1.8	1.5	.95	60	20.15k	.40	.30	.0.3	.035	•	.65	1	no 16 $\frac{1}{4}$ x 14 $\frac{1}{4}$ x 6 $\frac{1}{2}$
	AJ15	1.8	1.5	.70	50	20.15k	.40	.25	.0.5	.1.0	mtr	.65	2	no 16 $\frac{1}{4}$ x 12 $\frac{1}{2}$ x 4 $\frac{1}{4}$
JVC	VT900	1.7	0.8	.70	55	20.15k	.38	.25	.0.3	.0.5	lt. & mtr	.65	1	yes 5 $\frac{1}{4}$ x 16 $\frac{1}{4}$ x 12 $\frac{1}{2}$
	VT-700	1.7	0.7	.70	55	20.15k	.38	.25	.0.3	.0.5	mtr	.65	2	yes 5 $\frac{1}{4}$ x 16 $\frac{1}{4}$ x 12 $\frac{1}{2}$
KENWOOD	700T	1.8	1.3	100	65	20.15k	.45	.35	.0.15	.0.25	LED	.73.	1	yes 17 $\frac{1}{4}$ x 11 $\frac{1}{4}$ x 5 $\frac{1}{2}$
	KT-8007	1.5	1	100	65	+0.15	.47	.38	.0.15	.0.2	mtr	.75	2	yes 17 $\frac{1}{4}$ x 11 $\frac{1}{4}$ x 6 $\frac{1}{2}$
PIONEER	TX-9100	1.5	1.0	.90	65	20.15k	.40	.30	.0.2	.0.3	mtr	.75	2	yes 17 $\frac{1}{4}$ x 13 x 5 $\frac{1}{2}$
SAE	M4 VIB	1.6	1.5	.40	100	20.15k	.50	.38	.0.1	.0.15	scope	.75	0	no 17 x 5.75 x 10.5
	Mk VIII	1.8	1.5	.100	100	20.15k	.45	.35	.0.15	.0.2	mtr	.70	2	no 17 x 5.75 x 10.5
SAMSUNG	TF-1950	1.7	1.5	.80	30.15k	.40	.30	.0.2	.0.3	mtr	.75	2	yes 19 $\frac{1}{4}$ x 13 $\frac{1}{4}$ x 5 $\frac{1}{2}$	
SEQUERRA	Model 1	2.0	0.8	.130	.70	30.15k +0.3	.53	.36	.0.08	.0.12	•	.70	0	no 16 $\frac{1}{4}$ x 5 $\frac{1}{4}$ x 14 $\frac{1}{2}$
SONY	ST15130	1.5	1.0	100	60	20.15k	.4 $\frac{1}{2}$	.0.2	.0.3	mtr	.75	2	yes 15 $\frac{1}{4}$ x 13 $\frac{1}{4}$ x 6	
YAMAHA	C17000	1.7	1.0	.80	60	30.10k +0.5	.50	.35	.0.08	.0.3	mtr	.75	2	no 1200.00

\*Crystal-control PLL tuning. 4-Q.D. git readout.  
3-pos pre-select cards. Full MPX

Pressetem FET FM frontend. Crys.  
fills

Digital readout. FM 4-chan. ready. var., fixed  
& scope outputs.

4 chan. ready. mpx hi blend. front panel  
lev. contl.

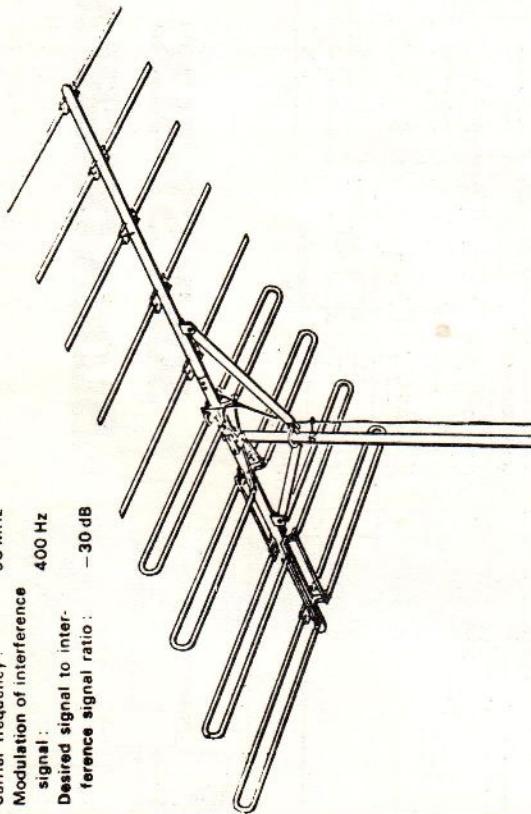
Output lev. contls; 2-level mute. mpx noise  
filt. PLL MPX.

Digital readout

Same as above

Oscilloscope and infrared readout. opt.  
panoramic adaptor. \$150.00

SELECTIVITY CURVES, ANTENNA DIAGRAM, AND CONFIDENTIAL DEALER PRICES

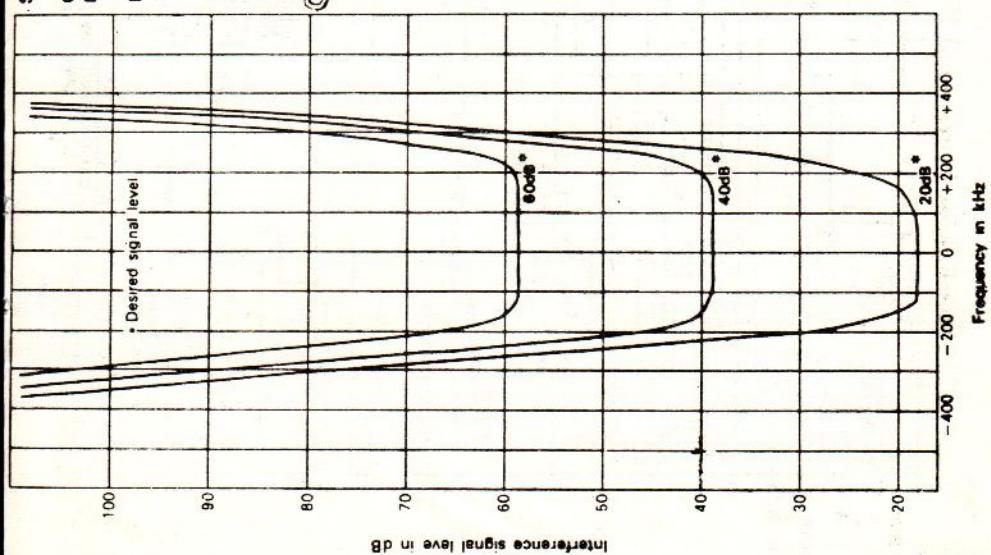


Selectivity  
Carrier frequency : 98 MHz  
Modulation of interference signal : 400 Hz  
Desired signal to interference signal ratio : -30 dB

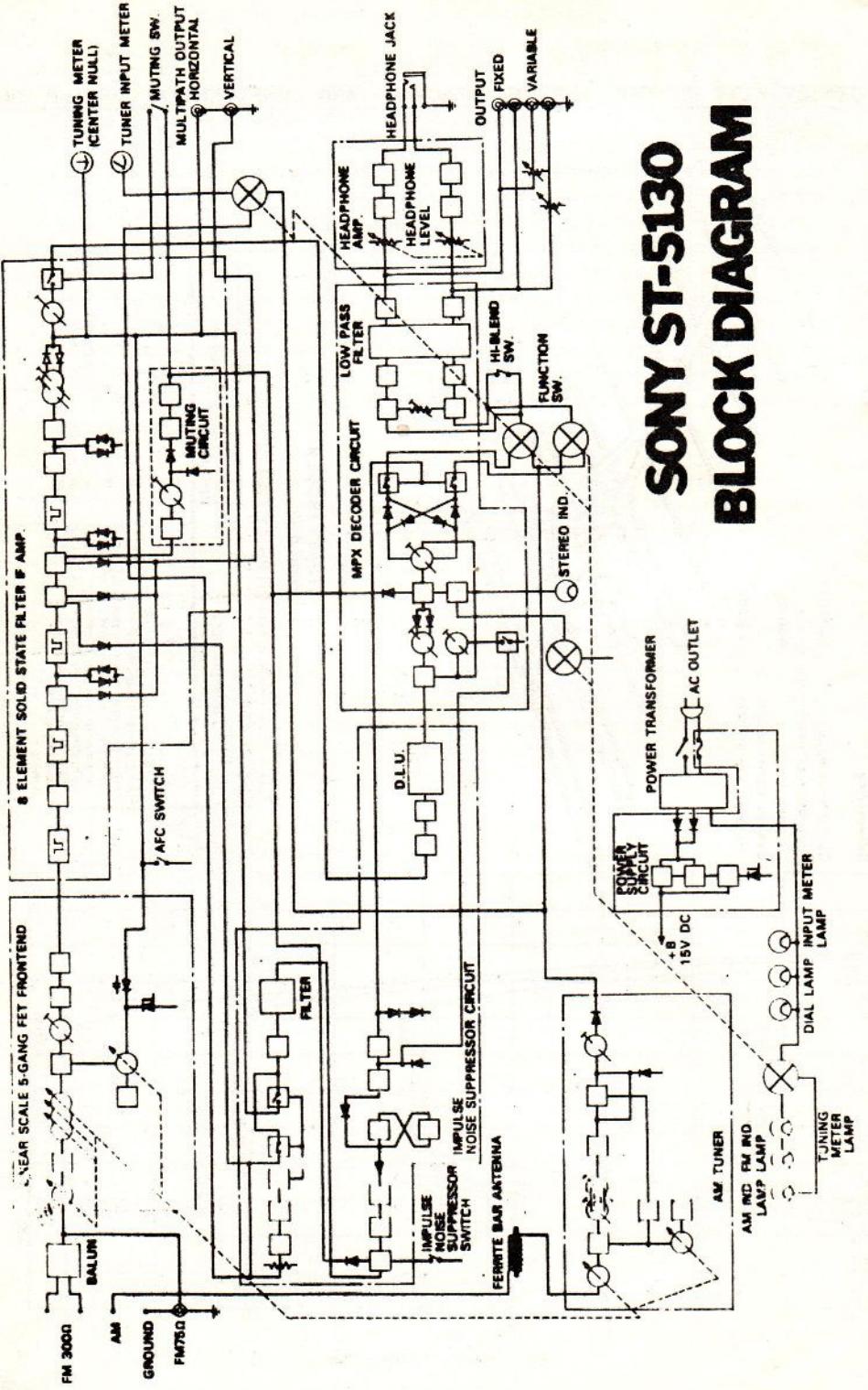
STEREO PROBE 9  
Model 440B

CC.1. INITIAL DEALER PRICE LIST

DESCRIPTION	WEIGHT DIMENSIONS	RETAIL	DEALER
<ul style="list-style-type: none"> <li>• 1.5 uV (HiFi) sensitivity</li> <li>• INS (Impulse Noise Suppressor) system eliminates virtually all man-made noise and interference</li> <li>• Counter station tuning meter</li> <li>• Signal strength meter</li> <li>• Muting switch</li> <li>• AFC</li> <li>• Cabinet TAC 1N optional</li> </ul>	16 lb. 8 oz. H - 5 1/2" W - 15 1/2" D - 13 1/2"	\$370.00*	\$213.10



# SONY ST-S130 BLOCK DIAGRAM



# EASTERN TV-DX

Bill Thompson  
1907 Seneca Street  
Buffalo, NY 14210

August 1976

With only a few exceptions, June E-skip activity wasn't very exciting. The exceptions, however, include one excellent day when the MUF got all the way up to ch 7. June 27th turned out to be a super day, with MUF at or above 107.9 MHz for hours in some places. Your editor noted moderately heavy (but brief) CCI on his local ch 7. It's likely that other DXers in Eastern areas without locals on 7 may have noted--and possibly identified --Es on ch 7; unfortunately, no reports of this have shown up yet here. Good June Es openings were reported also on such days as the 16th, when an unusually intense and quite widespread Maritime opening occurred together with a series of more common North-South ones. Partly due to the spill-over effect one super day can have on the next, June 28 also appears to have been excellent. Most reported June tropo openings were average--but Bob Seybold noted some very good morning openings in late June plus super early morning UHF ducting to areas as far away as Mississippi on June 26.

Note: Under "MUF", "FM" designates Es noted above 88 MHz. June E-skip dates: 1 2 3 4 5 6 7 8 9 10  
number of reporters 5 2 5 7 6 6 9 1 1 1  
MUF to at least: ch 5 3 FM4 FM 4 FM FM4 3 3 4

11	12	13	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
4	4	2	8	3	7	6	5	7	4	2	1	5	6	10	10	3	1
5	FM	3	FM	3	6	6	4	6	3	3	2	FM	6	7	FM	3	2

Chris A. Corso 78 McAdam Avenue Toronto, Ontario M6A 1S7 (416)781-0400

May	7 Tr 2300 (CHLFT2)-40 London Ont
20 Tr 0800 WVIZ-25 Cleveland OH(200)	"Testing with pattern
1720 WSEE-35 Erie PA (135)	consisting of a rectangular quadrilateral and a colored line to the left"
21 0000 CHEX-12 Peterborough (80)	(It was a sine square -bt)
WICU-12 Erie PA (135)	0100 WJET-24 Erie PA (135)
0130 WUAB-43 Cleveland OH(200)	12 1100 All Erie U's & V (135)
(all Erie U's, WICU-12 (135)	WUAB-43 Cleveland (200)
day) WUAB-43 Cleveland OH(200)	WNBO-45 Alliance OH (240)
"Some CCI on CHLFT-25	(W46AB)-46 Brocton NY(98)
from WVIZ-25 Cleveland"	"xltr in Fredonia of WNED"
June	WKBD-50 Detroit MI (200)
7 Es 0930 WBRZ-2 Baton Rouge (1150)	WGPR-62 Detroit MI (200)
1000 WILD-3 "ABC affiliate"	WTVS-56 Detroit MI (200)
1030 WEDU-3 Tampa FL (1150)	1120 WBGU-57 Bowling Green (245)
1200 WLBT-3 Jackson MS (1035)	CKGN1-22 Cottam Ont (194)
1230 WMAB-2 Ackerman MS (910)	"CCI w/ CKGN22 Uxbridge"
1930 KTEW-2 Tulsa OK (1045)	CKGN29-29 Oil Springs (176)
Tr 2200 WOKR-13 Rochester NY(105)	"CCI w/ WUTV-29 Buffalo"
2230 WUAB-43 Lorain OH (200)	1130 CKCO3-42 Oil Springs (176)
2300 WXXI-21 Rochester NY(105)	

Equipment includes 7' Sony with UHF detent tuner, 4 bay bowtie UHF antenna on rotor; rabbit ears used for VHF. (Thanks for the report. Welcome -bt)

Martin J. Theil 12 Princeton Drive E. Holiday, FL 33589 (813)934-5843

April	27 Es 1900 WBHM-2 Chicago IL 4334
19 Tr 2100 WCBD-2 Charleston SC 4444	28 1300 CHNB-4 North Bay Ont 4444
21 2000 WEWU-26 Naples FL 4444	1800 CKPR-2 Thunder Bay 3333
22 2100 WCBD-2 Charleston SC 4444	1830 CKCO2-2 Wiarton Ont 4434
2130 WMFE-24 Orlando FL 4444	WFVI-6 Philadelphia 4444
June	1900 WGR-2 Buffalo NY 4343
2 Es 1300 KQTV-2 St Joseph MO 5555 July	Tr 1800 WDTB-13 Panama City 5555
16 1830 WGR-2 Buffalo NY 3333	1830 WNCE-2 Nashville TN 5343
18 Tr 1830 WQTV-6 Thomasville 3434	1900 WDAF-4 Kansas City 4544
1915 WUFT-5 Gainesville 4444	WTWO-2 Terre Haute 4325
Es 1930 KTVY-4 Oklahoma City 4333	"All these logged with Rembrandt indoor rabbit ear antennae 2 blocks from WLCY-10 TV tower; also 3 miles from atomic power plant. Also in air lane, planes flying all day and night. So you see, lots of interference to all my electronic equipment."

August 1976

Ken Simon 528 Pilgrim Road West Palm Beach, Florida 33405 (EDT)

June

1 Es	1330 TGV-3 Guatemala GUATEMALA	18 Es 1915 KETS-2 Conway AR 3011R
	1410 YSS-2 San Salvador E. S.	"KETS-2/KETJ-19 ID"
2	1400 KQTV-2 St Joe (1225) 1970km	2000 "WPBT-2 announced 'Atmospheric interference...'"
	unIDs 2, 3 until 1800	2030 WBRZ-2 Baton Rouge 3321R
3	1305 KTVO-3 Ottumwa IA 3311R	2100 KFDX-3 Wichita Falls 2211R
	1330 KITV-3 Springfield 2011R	19 0930-1135 unIDs 2, 3
	1500 WNGE-2 Nash. (755) 1215km	1135 KITV-3 Springfield 2111R
	"MUF near 100 MHz"	unIDs 2, 3 to 1925
	1530 KTVI-2 St L. (1000) 1615km	21 1730 WGBH-2 Boston T
Tr	2000 WBHH-20, WMFE-24, WEVO-26	1740 WPSE-3 Hartford CT 3322R
	WTVX-34, WSWB-35, WTOG-44	WCBS-2 New York 2211R
	W69AA-69 Hollywood FL R	unID-4 "local nx (WBZ?)"
4 Es	1335, 1500 unIDs "MUF nr 100MHz"	1820 KYW-3 Philadelphia 2211R
	2025 unID-2 "ABC (KTVI or KQTV)"	22 1307 unIDs 2, 3
5	1130 WKAQ-2 San Juan PR 4131R	2050 "signs of real weak skip"
	1515 KVVA-2 Caracas VENEZUELA	23 1759 RPO-3 Santiago PANAMA T
	KVVA-3 //2 VENEZUELA	1814 WCAX-3 Burlington VT 2011R
	1545-1700 unIDs 2, 3	25 1310-1910 unIDs to ch 4
7	1730 WGBH-2 Boston MA T	1910 unID-3 "looks like KITV"
	1805 WDTH-2 Dayton OH T	1930 CKGN-6 Paris Ont -435R
	1915 "skip wiping out WPFT-2 even in their direction"	"on FM set"
	1950 "2-3 almost completely unwatchable..."	2015 WJBK-2 Detroit MI 2011R
	1955 WCIA-3 Champaign IL 2111R	2055 WBBM-2 Chicago IL T
	2030 KITV-3 Ottumwa-Kirksville	0920 KTVI-2 St Louis MO T
8	1335 unID-2 "SS/with ads... (color bar EP) thru 1530"	2135 WSYR-3 Syracuse NY 2011R
	1530 TGV-3 Guatemala City T	27 1010 WFSB-3 Hartford CT 2211R
11	1930 unIDs 2, 3	unIDs to ch 4
12	2025 CKVR-3 Barrie Ont 2211R	1100 WSYR-3 Syracuse NY 2011R
13	1000 KDKA-2 Pittsburgh PA R	WCBS-2 New York NY 2011R
	WKTW-2 Utica NY T	1100-1530 "unreadable 2, 3, 4... WPTV-5 local CCI noted with MUF up to 105.34 to Detroit, Pittsburgh, Bermuda"
16	1315 WDTH-2 Dayton OH 4021R	1530-1910 many unIDs
	1410 WHEO-3 Kalamazoo MI 3111R	0010 unIDs 2, 3, 4
	WAVE-3 Louisville 3111R	"Skip so massive and strong most stations unreadable."
	1610 KTVI-2 St Louis MO 4011R	1330 CKVR-3 Barrie Ont 1011R
	1625 WFSB-3 Hartford CT 2011R	"signs of skip in FM band, gone by 1400"
	unID-2 "Sesame St. (KETS?)"	2100 KYW-3 Philadelphia 4122R
	1700 WCIA-3 Champaign IL 3011R	29 1310 unID-2 "3/4 GB diagonal CCI 420 kHz over WHHS"
	"3/4 ID... MUF to 93 MHz"	30 1550-1600 unIDs 2, 3
	1835 KDKA-2 Pittsburgh 0311R	1700 WJBK-2 Detroit MI 1011R
	1900 WPSX-3 Clearfield 3211R	"in/out for short periods over the next hour..."
	"at this point 2, 3, 4 unwatchable, MUF nr 94 MHz"	
17	1410 unIDs 2 & 3, NBC	
	1850 WSYR-3 Syracuse NY 3011R	
18	1915 (KTVY)-4 OK City 4022R	
	WLBT-3 Jackson MS 2222R	
	WSYR-3 Syracuse NY T	

"A fairly good month but nothing much new. Tentative on 3 from Panama."

John Combs 816 W. Harvard Orlando, Florida 32804 (305)843-4829 (EDT)

June

7 Es	1915 WSYR-3 Syracuse NY (1025)	27 Es 1551 "Hvy CCI to 6, MUF to FM"
	1916 WHEO-5 Syracuse NY (1025)	WNEW-5 New York NY (995)
	1920 "MUF into FM"	1612 WPTZ-5 Plattsburgh NY T
	1930 "Extremely heavy now--at least 6 different stations noted on 3, 1930-2000"	WCBS-2? New York NY T
	2200 KLNE-3? Lexington NE T	"I'm gone 1630-2245"
27	1540 WNEW-5 New York NY (995)	2300 WGBH-2? Boston MA T
	WFSB-3 Hartford CT (1085)	unID-3 "TV-3 Total News"
		28 2130 "In 2-6, but short trop on Jax, Tampa stns produced hopeless CCI"

"The Es season has been pretty good in FL. There's been more than I've seem, since I've been working and am usually too busy to tune in. The lack of outdoor antennas isn't so bad--note two new loggings! Es is so much easier to pull on 5 with WDBO-6 back at Bithlo tower--20 mi. away."

August 1976

Roger Gravelle 60 Valerie Street St. Thomas, Ontario N5R 1A8 (EST/EDT)  
 February 19 Es 0335 CBLFT1-4 Moose Jaw (1548)  
 2 GW 1800 CIC028-28 Kitchener (60) 0340 CHSS- Wynard Sask T  
 June 7 GW 1800 CBLFT2-40 London Ont (15) "No positive ID but only channel 6 in area for hundreds of miles."  
 11 0300 CITY-79 Toronto Ont (130) 21 1230 WBRZ-2 Baton Rouge {1080}  
 CICO-19 Toronto Ont (130) 22 1230 WBRZ-2 Baton Rouge {1080}  
 "CN Tower Test; CIC028-28, 23 GW 0200 unID-26 "Test pattern.  
 CICO18-18 also on during test" Think new ch 25 Toronto."  
 18 Es 1400 WTBS-2 Miami FL (1500) 24 0300 CBLFT3-48 Chatham Ont T  
 1700 CKCW-2 Moncton NB (1100) "Same weird TP that 40  
 1730 CKET-3 Halifax NS (1300) London has--however 40  
 off at time."  
 19 0252 CKHI-2 Prince Albert (1600) 27 Es 2000 WTBS-2 Miami FL (1500)  
 0255 CKUS-3 Yorkton Sask (1550) 0315 CKCR-2 Regina Sask WJXT-4 Jacksonville (1200)  
 Also noted testing: CICO59-59 Chatham (60 mi). "Channel 40 London on about 20 hours a day with electronic test pattern with vertical narrow rainbow (all colours) in centre of it (and grey vertical bars). If audio can be heard—it is a dual tone high pitched test tone—annoying to listen to for more than 15 sec. Sorry I report so infrequent—just no time & illness. Have new Delhi 1047 in garage to put up but has been hectic at work as well as home. Ice storm in March ruined my Delhi 1037 VHF. Parabolic 5' Delhi came thru it OK. 73's"

Tony Ward, VE3IAT RR4 Guelph, Ontario N1H 6J1 (EST/EDT)  
 "Well what the hell ever became of Tony Ward? Well it's been a while I guess. The winter was lousy & interest flagged after the super trop openings of Oct.-Nov. 1975. Also I sat & looked at the map plotting unlogged UHF & realized how few there are left to the West, & since relogs interest me less than they maybe should I started working on a ham ticket. Since April 2 have been VE3IAT & am having a ball on HF & 2 meters. Biggest thrill came in working Florida on 146.52 mc/s on June 27th. MUF must have been to ch 7 not too far South of here!"

October 4 Tr 0900 "UHF snowfree to S. & S.W. as far as WKPC-15"  
 27 1815 WHEM-40 Indianapolis (405) 4 Tr 2230 WVTW-18 Milwaukee WI  
 1830 WKMR-38 Morehead KY 5 0000 WTVO-17 Rockford IL  
 1845 WGPR-62 Detroit "snowfree" 0010 KMBG-14 Sioux City IA  
 1855 WTVQ-627 "bars on WGPR" 1900 CKCO3-42 Sarnia Ont  
 28 0010 WLFI-18, WICD-15 "Best haul at 810 miles,  
 0120 WAND-17 Decatur IL local ads, CBS movie"  
 0125 WICS-20 Springfield IL 1900 CKCO3-42 Sarnia Ont  
 0135 KDNL-30 St Louis MO "On regular programming.  
 0140 WKWK-25 Peoria IL Very directional antenna.  
 0145 WXIX-19 Cincinnati OH Is very weak here & in  
 0205 WRTV-6 Indianapolis IN mobile in St. Thomas,  
 0215 WTAE-4 Pittsburgh PA 20 miles from London."  
 0900 WTVQ-62 Lexington KY December 12 MS 0532 WBTV-3 Charlotte NC  
 2245 WUSI-16 Olney IL "good" "Multiple bursts,  
 + WICD-15, WLFI-18 Bullseye TP"  
 2310 CICO-24 Ottawa Ont "full GW 1830 CIC028-28 Paris Ont  
 time on troposcatter" "Dreaded newcomer  
 local in Kitchener."  
 November 18 1130 CICO18-18 London Ont

May 18 Es 1300 KETA-3 (KOTA-3?? -bt)  
 4 Tr 2025 WHP-21 Harrisburg PA 1305 KPRY-4 Pierre SD  
 2032 WSA-43? "bars on WUAB" "new station on air"  
 2035 WLVT-39 Allentown PA June 6 GW 2300 CBLFT2-40 London Ont  
 2103 WITF-33 Hershey PA "TP, new CBC French"  
 2230 KRIN-32 Waterloo IA 28 Es 1200 KPRY-4, WTBS-2, WTVJ-4,  
 "CCI on WFLD, then in clear WEDU-3  
 + southern & central WI 1900 "WWL-4 & area"  
 WMFT-15 etc; WCMU-14 GW 1915 CBLFT1-76 Paris Ont  
 WKOW-27 w/CCI; KSIN-27?? "Another new Kitchener"  
 WHA-21, WCIU-26 in Spanish"  
 "And that's it. CN Tower plus 2 new locals on UHF have rendered my CMA-Ub near useless with intermod & images. Looking for UHF relay to bypass the pre-amp. Best 73's, VE3IAT."

August 1976

Scott Levitt	328 Rahway Avenue	South Plainfield, New Jersey	07080 (EDT)
May	16 Es	1930 WKRG-5 Mobile AL	(1005)
31 Es	1000 unIDs 2, 3	2000 WMAF-2 Ackerman MS	(912)
June		2030 WBRZ-2 Baton Rouge	(1126)
4 Es	1600 unIDs 2, 3, 4	2100 CKPR-2 Thunder Bay	(883)
5	1400 KATC-3 Lafayette LA (1189)	2000 WBRZ-2 Baton Rouge	(1126)
	WBRZ-2 Baton Rouge LA? T	1900 WTHS/WPBT-2 Miami	(1083)
	WTHS/WPBT-2 Miami (1083)	1930 WESH-2 Daytona Beach (940)	
	WTvj-4 Miami?	1000 WLBT-3 Jackson MS	(1031)
6	2000 WTvj-4 Miami FL (1083)	1030 WWL-4 New Orleans	(1152)
	WDBO-6 Orlando FL (912)	1100 WEDU-3 Tampa FL	(980)
	WPTV-5 Palm Beach (1083)	1900 WTHS/WPBT-2 Miami	(1083)
	WESH-2 Daytona Beach (874)	1906 WESH-2 Daytona Beach (874)	
	2300 WNGE-2 Nashville TN (716)	2000 KFDX-3 Wichita Falls (1391)	
7 Es	1155 WMAF-2 Ackerman MS (912)	2030 KTVI-2 St Louis MO	(850)
	1210 WNGE-2 Nashville TN (716)	2130 WCIX-6 Miami FL	(1083)
	WDAB-4 Kansas City (1055)	1030 WESH-2 Daytona Beach (940)	
	1300 KSNB-4 Superior NE (1211)	1100 WTvj-4 Miami FL	(1083)
	"KAYS-4 ?????"	1150 WCIX-6 Miami FL	(1083)
	1320 KMTC-3 Omaha NE (1083)	1CR-6 Havana CUBA	(1332)
	1400 KGLO-3 Mason City IA (955)	1500 WEDU-3 Tampa FL	(980)
	1500 KDAL-3 Duluth MN (940)	WPTV-5 Palm Beach	(1033)
	1900 WEDU-3 Tampa FL (980)	2100 WDSU-6 New Orleans	(1152)
	WBRZ-2 Baton Rouge (1126)	2200 WBRZ-2 Baton Rouge	(1126)
8 Tr	2200 Connecticut U's 20, 24, 30,	KATC-3 Lafayette LA (1189)	
	49 and 53, Salisbury U's	1300 WEDU-3 Tampa FL	(980)
	to Boston U's 38, 56, RI V's	1325 KDAL-3 Duluth MN	(985)
	WSMW-27 MA, WHRO-15 VA	1400 KXJB-4 Valley City	(1247)
	0000 WETA-26 Washington DC	1700 KCKT-2 Great Bend	(1296)
12 Es	1300 WRCB-3 Chattanooga (687)	2130 WJXT-4 Jacksonville	(810)
16	1300 WTHS/WPBT-2 Miami (1083)	"Twenty-seven new ones this time bring total up to 122, 43 E-skip."	
	1530 WTvj-4 Miami FL (1083)	July	
	WEDU-3 Tampa FL (940)	1 Es 1300 WTHS/WPBT-2 Miami (1083)	
	1535 WESH-2 Daytona Beach (874)	WEDU-3 Tampa FL (940)	
	1540 WCIX-6 Miami FL (1083)	1405 WJXT-4 Jacksonville (810)	
	1600 WUFL-5 Gainesville (885)	1430 WCTV-6 Thomasville (855)	
	1700 WRBL-3 Columbus GA (798)	1450 WDTIQ-2 Dozier AL (922)	
	1830 WTvj-4 Dothan AL (869)	3 Tr 1630 WTNH-8 New Haven CT (95)	
	1845 WEAR-3 Pensacola FL (998)	1700 W62AA-62 New York (23)	
	WAEC-6 Greenwood MS (969)	4 Es 1830 WTvj-4 Miami FL (1083)	

Rod O'Connor P.O. Box 72 Southwest Harbor, Maine 04679 (EDT)

Equipment includes 19" G.E. color set, Finco 9 element antenna, RCA rotor.

July

1 Es 1715 KMOX-4 St Louis MO 5523 (775) "had Mike Douglas until 6 EDT"  
 1720 WSVA-3 Harrisonburg 4423 (450) "phone #—A.C. 703—for WV"  
 "Poor conditions most of June, although 2 good openings during middle of month. Rotator just installed on antenna on the Base "Rec Deck" and I've been taking full advantage of it. This is the first of many (I hope) reports to come." (It's really great to get a report from Maine! -bt)

Wayne L. Fitzgerald	718 Leesville Road	Lynchburg, Virginia	24502 (EDT)
June	4 Es	1500 KOAA-5 Pueblo CO	R1372
3 Es	1045 Tele-Rebelde-3 Holguin CUBA	16 1800 CBFT-2 Montreal PQ	N0635
	1053 Tele-Rebelde-5 Santiago CUBA	2000 KIII-3 Corpus Christi	R1244
	1055 unID-6 CUBA	21 1830 KENW-3 Portales NM	R1357
	1058 unID-2 CUBA	KTXT-5 Lubbock TX	R1279
	1125 WTHS-2 Miami FL R0840	KLID-2 Midland TX	R1372
	1130 WTvj-4 Miami FL R0840	27 1300 WPTV-5 W Palm Beach	N0759
	1300 WEAR-3 Pensacola FL N0675	1400 KALB-5 Alexandria	R0658
4	1045 TNacional-3 Santa Clara CUBA	1600 WOI-5 Ames IA	N0816
	1100 WTHS-2 Miami FL R0840	1630 WCCO-4 Minneapolis	N0833
	1115 KATC-3 Lafayette LA R0887	28 1730 KYTV-3 Springfield	R0927
	1230 KJAC-4 Beaumont TX R0998	1900 CBIT-5 Sydney NS	N
	1300 KOCO-5 Oklahoma City R1015	CJCB-4 Sydney NS	R
	KOTV-6 Tulsa OK N0918	1920 KGLO-3 Mason City	R0827
	1355 KTVC-6 Dodge City R1127	2315 KOTV-6 Tulsa OK	R0918
	1430 KRIS-6 Corpus Christi N1244		

August 1976

Steven Sprachman 3939 Eve Drive Seaford, New York 11783 (EDT)

May	16	Es 1800 WABG-6 Greenwood MS (1050)
15 At Plattsburgh NY:	1915	WCTV-6 Thomasville (900)
Es 1530 WCED-2 Charleston SC (885)	2000	WLET-3 Jackson MS (1050)
WCIV-4 Charleston SC (885)	18	1930 WJMN-3 Escanaba MI
"Next year's room here will be on the 8th floor of one of the tower dorms, facing north..."	19	KDAL-3 Duluth MN plus unIDs to ch 6
June (Back at Seaford)	20	2030 unID-2
6 Es 1900 KYTV-3 Springfield (1050)	26	1930 unID-2
unID-6 CBS	27	2300 unIDs 2-4
8 Tr 2300 WGBX-44 Boston MA, "tent: WHCT-18, WCDC-19, WGBY-57"	28	2200 KOTV-6 Tulsa OK plus unIDs 2-6
11 0830 WCCB-18 Charlotte NC (550)	1730	KMTV-3 Omaha NE
"farthest UHF logged so far" WRLP-32 Greenfield MA	1900	KGLO-3 Mason City IA
16 Es 1535 WEDU-3 Tampa FL (1050)	1930	KDAL-3 Duluth MN
plus unIDs to ch 6	2030	WTVO-2 Terre Haute IN
1800 WRBC-3 Memphis TN (980)	2200	WSIL-3 Harrisburg IL (850)
WSIL-3 Harrisburg IL (850)	2300	Thomasville (900)
		KARD-3 Wichita KS
		KTAL-6 Shreveport LA

Bob Seybold Bennett Road Dunkirk, New York (EDT)

"A few notes on recent DX before I forgot. Returned to my DX center in the hills on evening of June 20th for first time since last fall. Have been back a couple times since. That tropo sure is something up there."

June

- 20 Es "Some evidence of skip on and off much of day--main peak in early evening."  
Tr "Evidence of tropo building all day finally peaking some in evening; returned to hills DX center--WANE-15 WNDO-16 WQEX-16 WNEP-16 WOFT-16 (late evening) WJAN-17 CICO18-18 WLEX-18 WUCM-19--also possible Cincinnati 19; WXON-20 with heavy QRM; WKMU-21 Murray KY (tentative); WKBF-22 (through Global 22) WKAR-23 WIDH-24 WEYI-25 WKYT-27 WLKY-32 WOSU-34 CBLFT2-40 (testing) CKC03-42 CBLFT3-48 (testing) Chatham Ont; WPGH-53 CICO59-59 Chatham (testing); WKBD-50 WGFR-62. Canadian U's had excellent signals. V's to Cincinnati, Kentucky, Indiana."
- 21 Es "E-skip at mid-day, then again from 1600 to 2000--extremely heavy skip in early evening. Locals on 2 & 4 knocked out--not able to watch for IDs but there was plenty there & strong on channels 2-6."
- 22 "More E-skip at various times, including Colorado, Wyoming, Dakotas, Nebraska, some Canadians."
- 23 Tr "From the hills--very good signals: WCMU-14 WANE-15 WLYH-15 WNEP-16 WNDO-16 CICO18-18 WHIZ-18 WSYE-18 WUTR-20 WDCA-20 (good) WHP-21 WPTA-21 WSBT-22 WKAR-23 WDAU-22 WAPB-22 WIDH-24 WEYI-25 WTPA-27 WREB-28 WWFB-31 WOPC-38 WICZ-40 WUHQ-41 (perfect) CKC03-42 WKBD-50 WTVA-56 CICO59-59 (excellent) WVIA-44 and 2 of their translators, also about 8 WNED-17 translators, WKJG-33 WPGH-53 & others including Toledo, Bowling Green."
- 24 Es "Some evidence of skip about 1400, no IDs.
- 25 GW "Evening--CBLFT1-76 Kitchener, Ontario in like local (testing)."  
Tr "Tropo good--others on UHF real good. CICO59-59 Chatham with programs, CBLFT2-40 London (testing) in good."
- 26 Terrific opening noted in early A.M.--KMTV-27 Springfield MO, KINL-30 St Louis MO noted, then Ohio, Indiana, Illinois, Kentucky U's noted with great signals--then WMAA-29 Jackson, Mississippi--others include: WCMU-14 WICD-15 WANE-15 WTAP-15 WNDO-16 WAND-17 (terrific signal) through WNED-17; WHIZ-18 WLFI-18 WRAU-19 WOUB-20 WICS-20 (snow free for others;) WOUC-44 WNEO-45 WPBO-42 WKYT-27 WLEX-18 WUHQ-41 with heavy QRM; WMUL-33 WKJG-33 plus South Bend, Peoria, Michigan U's & many Pennsylvania U's."
- "More recent DX includes tropo opening to eastern PA, good tropo July 6-7. CICO32-32 Windsor, Ontario logged testing, CBLFT-78 Windsor noted on--signal not bad in hills. Most Canadian U's from Ontario have near perfect signals at hills spot including London 18, Toronto 19, Uxbridge 22, Toronto 25, Kitchener 28, Orl Springs 29, London 40, Chatham 48 & 59, & CITY-79 Toronto--also CICO-24 Ottawa quite frequent. Some good skip openings--E-skip evening of July 7th. Some tropo & E-skip over past weekend quite good at times. Details in next report. Log at 705."

August 1976

**Paul D. Traska 64 Weaver Avenue Buffalo, New York 14206 (EDT)**

<b>June</b>	28 Es 0200 KWGM-2 Denver CO R
16 Es 1620 unID-3 "S.W.--PBS"	0205 KOCO-5 Oklahoma City OK R
1635 CBHT-3 Halifax NS R	0207 KMOL-4 San Antonio TX N
1636 CJCH-3 Halifax NS N	0209 KXAS-5 Ft Worth TX R
1700 CJCH-6 Caledonia NS R	0224 KQTV-2 St Joseph MO N
1800 CJON-6 St John's Nfld N	0226 KDFW-4 Dallas TX N
1830 WUFT-5 Gainesville FL R	0230 KFTV-3 Springfield MO R
WEHU-3 Tampa FL R	1745 WLBT-3 Jackson MS R
1831 WPTV-5 W Palm Beach FL R	1930 KLINE-3 Lexington NE R
1930 WDBO-6 Orlando FL R	2030 KOTA-3 Rapid City SD R
19 0300 CJOX1-2 Grand Bank Nfld R	unID-2 "color bars N.W."
CJOX-3 Argentia Nfld N	2320 KOTV-6 Tulsa OK R
0325 CJCN-4 Grand Falls Nfld N	2321 KARD-3 Wichita KS R
0338 CJON-6 St John's Nfld R	2330 KTVC-6 Dodge City KS R
20 Tr 1400 WNPE-16, WUTR-20, CICO-24 29 1100 KATC-3 Lafayette LA R	
1404 WKBS-48 Philadelphia R	30 Tr 0011 W70BC-70 Harrisburg PA N
WNJT-52 Trenton NJ R	0020 W10BA-70 Williamsport N
1930 WEAO-49 Akron OH R	0050 W66AB-66 Mehoopany PA N
2135 CICO59-59 Chatham Ont N	0100 W15AO-75 Harrisburg PA N
2140 CBLFT-48 Chatham Ont N	0104 W72AT-72 Towanda PA R
2155 WOSU-34 Columbus OH R	Philly, Harrisburg U's
2240 WSVN-47 Norton VA R	W63AB-63 Mansfield PA R
2310 W50AA-50 Watertown NY R	W64AE-64 Susquehanna PA R
21 0010 W64AG-64 Lowville NY R	W65AA-65 Canton PA R
0026 W68AE-68 Ogdensburg NY N	0240 W77AI-77 Wyalusing PA N
Es 0102 KTVS-3 Sterling CO R	1120 WKBS-48 Philadelphia R
0103 KLINE-3 Lexington NE R	WNJT-52 Trenton NJ R
Tr 0200 CFCF-12 Montreal, PQ R	1132 Harrisburg U's, WLVT-39
Es 1530 KBTX-3 Bryan TX R	
1600 unIDs on 3 ABC, CBS S.W.	
23 Tr 0104 CKCO4-11 Huntsville Ont N	July 1 Es 1302 WEAR-3 Pensacola FL R
25 Es 0305 CKCK-2 Regina Sask N	1303 WEHU-3 Tampa FL R
0315 unID-5 "color bars" N.W.	1326 WCIX-6 Miami FL R
0334 unIDs 4, 6 "programming N." GW 2030 CBLFT-76 Kitchener Ont N	1327 WTVJ-4 Miami FL N
26 Tr 0130 "Ft Wayne U's 15, 21, 33"	1430 WDBO-6 Orlando FL R
0230 WSPD-13 Toledo OH R	WPTV-5 W Palm Beach FL R
Es 1230 KTBS-3 Shreveport LA R	1530 KTBS-3 Shreveport LA R
1930 KTBS-3 Shreveport LA R	1600 KFDX-3 Wichita Falls TX R
2200 KBTX-3 Bryan TX R	1630 KARD-3 Wichita KS R
27 1200 WEHU-3 Tampa FL R	1635 KCKT-2 Great Bend KS R
1330 KATC-3 Lafayette LA R	1700 KLINE-3 Lexington NE R
1510 WDSU-5 New Orleans LA R	KMTV-3 Omaha NE R
1530 WABG-6 Greenwood MS R	1730 KTVS-3 Sterling CO R
1600 KALB-5 Alexandria LA R	4 Tr 0210 CHNB-4 North Bay Ont R
1830 WBRZ-2 Baton Rouge LA N	5 0950 CICO32-32 Windsor Ont N
1930 WCTV-6 Thomasville GA R	1000 WEAO-49 Akron OH R
2000 WKRG-5 Mobile AL R	1030 WANE-15, WKJG-33 Ft Wayne
2330 WEAR-3 Pensacola FL R	6 0045 WPGH-53 Pittsburgh PA R
28 0108 KBTX-3 Bryan TX R	0057 WCDC-19 Adams MA R
0115 KCEN-6 Temple TX R	0110 WLFI-18 Lafayette LA R
0120 KTBS-3 Shreveport LA R	0835 "Ft Wayne signals"
0136 KAUZ-6 Wichita Falls TX R	0856 WSJV-28 Elkhart IN R
0200 KTVJ-4 Oklahoma City OK N	1000 WNDU-16 South Bend IN R
	9 2307 CHEFT-78 Windsor Ont N
	WBGU-57 Lima OH R

**Jim Alexander 4 Brook Court Parsippany, New Jersey 07054 (EDT)**

<b>June (at Lake Hiawatha NJ)</b>	28 Es (early) WEHU-3 Tampa FL
16 Es 1530 WEHU-3 Tampa FL	p.m.) KDAL-3 Duluth MN
1600 CJOX-3 Argentia Nfld	2000 WCTV-6 Tallahassee FL
1700 WRBL-3 Columbus GA	
1755 WLBT-3 Jackson MS	July 1 Es 1230 WTHS-2 Miami FL
1800 WEAR-3 Pensacola FL	WEHU-3 Tampa FL
1830 KARK-4 Little Rock AR	1500 WREC-3 Memphis TN
27 1430 WEHU-3 Tampa FL	1700 KTVI-2 St Louis MO
1500 WESH-2 Daytona Beach FL	4 1400 WEHU-3 Tampa FL
1530 WTVJ-4 Miami FL	1715 WUFT-5 Gainesville FL
WCIX-6 Miami FL	12 1900 WEHU-3 Tampa FL

August 1976

Bill Grant 67 Brattle Street Worcester, Massachusetts 01606 (EDT)

June		26 From Conway NH:
11 Es	2300 KMTV-3 Omaha NE	Es 1930 WJXT-4 Jacksonville FL
13	1000 WPBT-2 Miami FL	1950 WESH-2 Daytona Beach FL
16	1934 KTVO-3 Kirksville MO	Back at Worcester:
	1730 CJOX-3 Argentia Nfld	Es 2358 WMAB-2 State College MS
	1800 WISC-3 Madison WI	0023 KYTV-3 Springfield MO
	1830 WABG-6 Greenwood MS	0132 KTEW-2 Tulsa OK
	1835 WBRC-6 Birmingham AL	0911 WESH-2 Daytona Beach FL
17	0027 KQTV-2 St Joseph MO	0930 WPBT-2 Miami FL
	0100 KTEW-2 Tulsa OK	1000 WEDU-3 Tampa FL
18	1820 WCIA-3 Champaign IL	1030 WTVJ-4 Miami FL
	1830 KTVO-3 Kirksville MO	1220 WESH-2 Daytona Beach FL
	1900 WISC-3 Madison WI	1259 WTWO-2 Terre Haute IN
	1930 KAAL-6 Austin MN	1300 KTVI-2 St Louis MO
	2330 CBWFT-3 Winnipeg Man	1302 WNQE-2 Nashville TN
19	0055 WMT-2 Cedar Rapids IA	1400 WPBT-2 Miami FL
	0100 KDIX-2 Dickinson ND	2305 Cuba-2 "unID (in SS)"
	0800 WPBT-2 Miami FL	2308 WBRZ-2 Baton Rouge LA
	0910 WTVJ-4 Miami FL	2325 WESH-2 Daytona Beach FL
20	1230 WESH-2 Daytona Beach FL	28 0002 WMAB-2 State College MS
	2315 WMT-2 Cedar Rapids IA	0030 WDIQ-2 Dozier AL
21	0000 KTCA-2 Minneapolis MN	0125 KTBS-3 Shreveport LA
	0030 KUSD-2 Vermillion SD	1900 KGLO-3 Mason City IA
	0100 WMT-2 Cedar Rapids IA	1910 KMTV-3 Omaha NE
	1900 WISC-3 Madison WI	2000 KDAL-3 Duluth MN
	1918 KGLO-3 Mason City IA	
	1930 KTVO-3 Kirksville MO	1 Es 0730 WESH-2 Daytona Beach FL
22	1920 CJOX-3 Argentia Nfld	1730 KUSD-2 Vermillion SD
25	2015 Cuba-3 "unID in SS"	4 1125 TV National-3 Santa Clara CUBA
	2040 WEDU-3 Tampa FL	1130 WPBT-2 Miami FL
26	0850 KETS-2 Little Rock AR	1230 WESH-2 Daytona Beach FL
	0930 WSB-2 Atlanta GA	WEDU-3 Tampa FL

From Fryberg ME:  
Es 1900 WESH-2 Daytona Beach FL  
WEDU-3 Tampa FL

"Nothing very exciting about the Es season thus far. I have noticed quite a bit of skip after midnight. I hope to see everyone in Chicago for the Convention. Best of DXing."

Bill Thompson 1907 Seneca Street Buffalo, New York 14210 (EDT)

June		20 Tr 2319 CHLFT3-48 Chatham Ont
17 Es	1930 WRCB-3 Chattanooga TN	testing w/resolution pat
	WEAR-3 Pensacola FL	CIC059-59 Chatham (160)
	1950 WBRZ-2 Baton Rouge LA	testing w/colorbars;
18	1615 unID-2 heavy 10 CCI WGR-2	better signal than 48
19	0046 KLNB-3 Lexington NE	2355 WWNY-7 Watertown thru WKBW
	0058 CBWFT-3 Winnipeg Man	21 Es 0030 KTBS-3 Shreveport LA
	0124 CKOS-3 Yorkton Sask	0045 KTAL-6 Shreveport LA
	0231 CJAY-2 Brandon Man	0103 KATC-3 Lafayette LA
	0233 KOTA-3 Rapid City SD	23 Tr 0015 Philadelphia U's (270)
	CBKMT-4 Moose Jaw Sask	0032 Harrisburg U's (200)
	0301 KWGN-2 Denver CO	Es 1917 unIDs 2-4 southwest
	0304 CKCK-2 Regina Sask	25 0259 CBWFT-3 Winnipeg Man w/TP
	0626 WLBB-2 Bangor ME	0301 CKCK-2 Regina Sask
	plus many unIDs northeast	GW 2033 CHLFT1-76 Kitchener (80)
20	2015 unIDs 2-4 to south	testing w/resolution pat.
	1830 unIDs 2, 3 to southwest	26 Es 1900-2200 unIDs 2,3 in and out
	1857 unID-4 NBC southwest	2214 WCIX-6 Miami FL w/phone #
Tr	2114 WKLE-46 Lexington KY (475)	2221 WEDU-3 Tampa FL w/ID
	2115 WOSU-34 Columbus OH (290)	2225 WSB-2 Atlanta GA
	most U's under 300 mi. to	2230 WEAR-3 Pensacola FL
	southwest very strong	WSAV-3 Savannah GA
	2231 WKYT-27 Lexington KY (475)	2345 KARD-3 Wichita KS
	WILKY-32 Louisville (480)	27 1215 t/in: unIDs 2-6; lowband
	WOUWB-20, WOUC-44 vy good	packed, several per
	2234 WSVN-47 Norton VA (480)	channel--MUF at least
	2300 WNPE-16, WNPI-18, W50AA-50	107.9 MHz, maybe higher!

Bill Thompson (continued)

June

27 Es 1250 WBRZ-2 Baton Rouge LA  
 1258 KATC-3 Lafayette LA  
 1300 WDSU-6 New Orleans LA  
 KALB-5 Alexandria LA  
 1315 unID-6 Spanish, nx--CUBA?  
 1430 WEDU-3 Tampa FL  
 1530 WABG-6 Greenwood MS  
 1605 WLBT-3 Jackson MS  
 1618 WREC-3 Memphis TN  
 1800 WSB-2 Atlanta GA  
 WKHL-3 Columbus GA  
 1830 WDIQ-2 Dozier AL  
 WEAR-3 Pensacola FL  
 WKRG-5 Mobile AL  
 KATC-3 Lafayette LA  
 1900 WWL-4 New Orleans LA  
 1955 skip really getting hvy;  
 MUF way, way above 107.9  
 2043 unID-7 20 CCI in & out,  
 quite strong at times on  
 local; also weak 10 CCI  
 2100 WUFT-5 Gainesville FL  
 2200 WCTV-6 Thomasville GA  
 FM loaded until after 0000

28 Tr 0100 CKCO-11 Huntsville (165)  
 beats Ø with WIIC-11, which  
 is zero offset. CHCH off!!

Es 0110 KBTX-3 Bryan TX  
 0115 KCHE-6 Temple TX  
 0116 KTBS-3 Shreveport LA  
 0154 KOCO-5 Oklahoma City OK  
 0200 KARK-4 Little Rock AR  
 KTIV-4 Oklahoma City OK  
 0203 KWGN-2 Denver CO  
 0216 KOTV-2 St Joseph MO  
 0226 KDFW-4 Dallas TX  
 0228 KXAS-5 Ft Worth TX  
 0233 KYTV-3 Springfield MO  
 1136 ICR-6 Havana CUBA w/TP  
 1159 KOTA-3 Rapid City SD  
 1230 KORN-5 Mitchell SD  
 KFLO-6 Reliance SD  
 1238 KDLO-3 Watertown SD  
 1258 KFYR-5 Bismarck ND  
 1300 KDAL-3 Duluth MN  
 1430 KPRC-2 Houston TX  
 1600 WBRM-3 Columbus GA  
 1630 KATC-3 Lafayette LA  
 1706 KTBS-3 Shreveport LA  
 1738 WLBT-3 Jackson MS  
 1830 WEDU-3 Tampa FL  
 1900 KALB-5 Alexandria VA  
 KJAC-4 Port Arthur TX  
 w/ vy strong Ø thru local

28 Es 1930 KLNE-3 Lexington NE  
 2037 KOTA-3 Rapid City SD  
 2200 WCBI-4 Columbus MS  
 2245 Lowband TV getting load-  
 ed again, 3 or 4 stns per  
 channel, but not quite as  
 intense as last night!  
 2300 WDSU-6 New Orleans LA  
 WPTV-5 West Palm Beach FL  
 WCIX-6 Miami FL  
 2318 KOTV-6 Tulsa OK  
 2328 WKRG-5 Mobile AL  
 2329 KAUZ-6 Wichita Falls TX  
 2330 KTVC-6 Ensign KS  
 KTIV-4 Oklahoma City OK  
 29 0000 unIDs continue, but quit  
 Tr 2100 WKAR-23 E Lansing MI (280)  
 WUHQ-41 Battle Creek (310)  
 2300 WEYI-25 Saginaw MI (255)  
 30 0000 most WNED xltres in super  
 W70BA-70 Williamsport PA  
 0010 WKBS-48 Philadelphia (270)  
 Scranton U's vy good  
 W82AP-82 Limestone NY  
 0018 WDCA-20 Washington (285)  
 0030 W73AC-73 Clarks Summit  
 W79AC-79 Clarks Summit T  
 (weak CCI on CITY-79)  
 W76AH-76 Clarks Summit T  
 (weak CCI on CHEFTI; they  
 would pick tonite to test!)  
 0037 W65AA-65 Canton PA (130)  
 unIDs 77, 78, 82 all weak  
 W63AB-63 Mansfield (120)  
 W64AE-64 Susquehanna (175)  
 W72AT-72 Towanda PA (145)  
 0048 W66AB-66 Meshoppen (165)

July

1 Es 1245 t/in unIDs 2-5  
 1330 WPTV-5 West Palm Beach FL  
 WBDU-3 Tampa FL  
 WDBO-6 Orlando FL  
 1559 KFID-3 Wichita Falls TX  
 5 GW 2038 CICO32-32 Windsor (210)  
 testing; 3/4 CB w/ "TVO-32"  
 7 Es 1936 KDLO-3 Watertown SD  
 1942 KOTA-3 Rapid City SD  
 9 Tr 2155 CBEFT-78 Windsor Ont (210)  
 testing w/resolution pat.  
 2330 Ft Wayne U's,  
 WXYZ-7 Detroit thru local  
 2343 W39AA-39 Ft Wayne (345)  
 WEYI-25 Saginaw MI (255)  
 10 0155 WNDO-16 South Bend (410)  
 0200 unID-28 S.W.; new Columbus U?

Not listed are numerous tentative Es loggings which would only tend to waste space in a long report. June was a good month for me, but mainly because I spent more time than ever going after IDs on chs 2 & 4. There seemed to be many more nights of skip lasting well after my locals shut down. It's nice to see the MUF stay up around ch 4 until after 0300. The openings to the Maritimes and Manitoba & Saskatchewan were very enjoyable--something different for a change. The heavy CCI which soon faded on my local 7 was extremely frustrating. Unfortunately, Bob Seybold was out that evening; I'm sure he would have been able to pull in the ch 7 Es much better. As it is, I guess I was lucky to even be able to see the CCI --WKBW-7 is 20 mi away from my QTH, and they don't run full power for a highband outlet. I get a pretty decent antenna null on them as a result.

# CENTRAL TV-DX

William J. Draeb  
Ellis St. R.R.#2  
Kewaunee, Wi.  
54216

Deadline: 12th

The below normal tropes conditions continue to prevail. Es continues to be below normal both on the number of openings and their intensity, however there were some unexpected catches.

Cyril P. Schauer; 253 Montgomery St., E. Dubuque, Il. 61025 CDT

5-6 Tr 1900 WOI-5 Ia. 3423(155)	6-7 Es 1602 KIII-3 Tx. 4443(1100)
5-7 Tr 0535 WITI-6 Wi. 3444(150)	1603 KRGV-5 Tx. 3323(1210)
0537 WMAQ-5 Il. 3333(165)	1605 WEAR-3 Fl. 3322(865)
0540 WBEM-2 Il. 3433 "	1619 WEDU-3 Fl. 2322(1095)
0542 United-12 0212	1625 WKRG-5 Al. 3212(825)
0543 WGN-9 Il. 3433(165)	6-21 Es 1500 PBS-4; ant. pointed S.
0545 KCCI-8 Ia. 4444(160)	6-26 Es 1200 WPTV-5 Fl. 4413(1205)
Es 0546 United-3; program about Cuban crisis; ant. N.E.	1300 WEDU-3 Fl. 4423(1095)
Tr 0800 WITW-11 Il. 3333(165)	Tr 1305 WJFK-2 Mi. 2212(375)
0802 United-10; PBS stn. 2222	Es 1400 KID-3 Id. 4323(1080)
5-8 Tr 0150 KMOX-4 Mo. 3343(265)	6-28 Es 2100 WBRZ-2 La. 4324(835)
5-10 Es 0759 WTHS-2 Fl. 4411(1400)	2230 WETV-3 N.C. 3312(815)
0800 WESH-2 Fl. " T	2250 WCBD-2 S.C. " (880)
0801 WGEM-10 Il. 3323(200)	2300 WCSC-5 " "
5-12 Es? 2205 KTIV-2 Mo. 1211(265)	2310 WSAV-3 Ga. 3313 "
6-3 Es 1400 United-2 NBC 3212	7-1 Es 1130 WTHS-2 Fl. 4323(1400)
1430 United-3; color bars	1140 WEDU-3 Fl. " (1095)
6-4 Es 1330 WKRG-5 Al. 3311(825)	1150 WTVJ-4 Fl. 4222(1400)
No date Ms 2400 WTG-5 D.C. 4415(735)	1400 WCBD-2 S.C. 3223(880)
6-4 Es 1400 WBRZ-2 La. 4211(835)	
1530 KATC-3 La. 4312(850)	
6-5 Tr 0656 KHQA-7 Mo.(Il.) 3333(215)	
6-6 Es 1900 KMID-2 Tx. 3312(960)	
1915 United-5; Spanish; ant. SW	
1922 KENW-3 N.M. 3311(1035)	
2025 United-2; SSE, Puerto Rico mentioned several times. 1211	
2050 United-4 0211	
6-7 Es 1500 KCET-2 Ks. 2211 T	
1505 United-5; tp; probably PBS.	
1519 KPRC-2 Tx. 2211(925)	
1550 United-4 from Tx.	
1600 United-4 SW; PBS.	

dx to everybody." Cyril also passes along a newspaper article concerning KDUB-40 Dubuque, Ia. They are suppose to have been sold and will return to the air in mid-August some time. Thanks for the info Cyril and hope we hear from you again soon--wd.

Michael Hogan; 4811 Euclid Ave., E. Chicago, In. 46312 CDT

6-5 Es 1800 United-3; Tennis Tips	6-27 Es 2000 WSAV-3 Ga. 0334(988)
6-6 Es 1900 KDFW-4 Tx. 5434(910)	7-2 Tr 2200 WTVT-18 Milwaukee(105)
6-21 Es 1400-1600 Uniteds chs. 2-4	
6-24 Es 1000 Uniteds chs. 2-5	

"Also, during the last month a Winegard Chromstar UHF Model Ch-9065 was added. It's only  $\frac{1}{2}$  feet off the ground, so no spectacular dx recorded yet. When possible, the antenna will go to 30 feet or so."

Robert Zent; 1835 Fruit St., Huntington, In. 46750 (219)-356-1670 EST

6-3 Es 1510 Cuban Palm Tree tp; ch.2.	6-4 Es 1530 KPRC-2 Houston(960)
6-4 Es 1530 KATC-3 Lafayette(850)	6-7 Tr 0635 CKGN-29 Oil Springs(200)

Aug. 1976

Zent; continued---  
 6-7 Tr 0640 CKCO 3-42 Oil Springs(200)  
 Es 1535 KDUH-4 Hay Springs(950)  
 KTWD-2 Casper(1100)  
 1645 KACB-3 San Angelo(1090)  
 1700 KMID-2 Midland(1150)  
 1900 KENW-3 Portales(1100)  
 KFDX-3 Wichita Falls(900)  
 1925 KAMR-4 Amarillo(1000)  
 1930 KOCO-5 Oklahoma City(780)  
 KTVY-4 " " "  
 2000 KTXT-5 Lubbock(1060)  
 KWGN-2 Denver(1050)  
 KOA-4 " "  
 6-16 Es 1600 Cuban Palm Tree tp; ch.3  
 1610 WPBT-2 Miami(1100)  
 1700 CBHT-3 Halifax(1100)  
 1725 CHAU-5 Carleton(1075)  
 1730 CHSJ-4 St. John(1025)  
 CJBR-3 Rimouski(975)  
 1740 WCVB-5 Boston(750)  
 WBZ-4 " "  
 WGHH-2 " "  
 6-18 Es 1530 WPBT-2 Miami(1100)  
 1830 Unides chs.3,4,5; NE  
 1930 WLBB-2 Bangor(875)  
 2358 CKSA-2 Lloydminster T  
 saw commercial mentioning  
 Vermillion, At.  
 CKCK-2 Regina(1175)  
 6-19 Es 0030 CKBQ-2 Melfort(1300)  
 0055 CBWT-4 Lac du Bonnet T  
 0120 CBWFT-3 Winnipeg(875)  
 0142 CKOS-3 Yorkton(1125)  
 Tr 1935 CKGN-6 Paris(325)  
 1940 CITY-79 Toronto(370)  
 1945 CKCO 3-42 Oil Springs(200)  
 1959 CICO-28 Kitchener, Ont.  
 (repeats CICA-19)  
 2000 CICA-19 Toronto(370)  
 CBLFT-25 " "  
 2120 Erie U's(300; all new)  
 Also Cleveland&Youngstown U's.

6-21 Es 1530 KJAC-14 Port Arthur(925)  
 KIII-3 Corp. Chris.(1175)  
 1625 KMOL-4 San Ant.(1125)  
 1630 KBTX-3 Bryan(975)  
 1658 KENS-5 San Ant.(1125)  
 6-22 Es 1900 CBHT-3 Halifax(1100)  
 6-25 Es 1730 WPBT-2 Miami(1100)  
 WTVJ-4 " "  
 1900 ch.3; "television Cubana 6  
 6-26 Tr 0600 CICO-59 Chatham(175)  
 (satellite of CICA)  
 0602 Unided-40, N.E.(probab-  
 ly CBLFT-2-40 London--wd  
 0603 CKCO 3-42 Oil Springs  
 0605 CICO-28 Kitchener  
 CICO-18 London  
 0620 WOUC-44 Cambridge(220)  
 0628 CKGN-29 Oil Springs  
 0630 CKGN 1-22 Cottam(175)  
 Es 1200 WPBT-2 Miami(1100)  
 WTVJ-4 " "  
 WCIX-6 " " T  
 1300 KDIX-2 Dickinson(975)  
 6-27 Tr 0800 CKCO 3-42 Oil Springs  
 CKGN-29 " "  
 0805 CBLFT-3-48 Chatham(175)  
 CBLFT-2-40 London  
 0830 CICO-59 Chatham(175)  
 0835 CBLFT-1-76 Kitchener  
 0900 WSEE-35 Erie(300)  
 WJET-24 " "  
 Es 1400 WDEO-6 Orlando(900)  
 (vy intense opening;  
 muf over 107.9 Mhz)  
 WEDU-3 Tampa(950)  
 WTVJ-4 Miami(1100)  
 1410 WPTV-5 Palm Beach(1050)  
 1500 WCSC-5 Charleston(650)  
 1800 WWAY-3 Wilmington(625)  
 2000 WUFT-5 Gainesville(825)

"In the interest of saving space I've decided to discontinue listing relogs of stations less than 200 miles distant. (A good idea, especially during peak dx season--wd). Most stations within this range are in at some level every day. E-skip has veen outstanding this month with MUF often reaching well into the FM band with remarkable strength."

Marvin Shults: R.R.#1, Toulon, Il. 61483 CDT

6-14 Tr 0800 KMEG-14 Sioux City, Ia. 6-25 Tr 0830 KOZK-21 Springfield, Mo.  
 6-17 Tr 0730 WFIE-14 Evansville, In. KHIN-36 Red Oak, Ia.  
 0800 WVUT-22 Vincennes, In. KSIN-27 Sioux City, Ia.  
 6-18 Es 1730 WGHH-2 Boston, Ma. KHNE-29 Hastings, Ne.  
 6-19 Es 0005 CKBI-5 Prince Albert, Sk. 6-26 Tr 0800 KBMA-41 Kansas City, Mo.  
 6-20 Es 2125 KWGN-2 Denver, Co. KYNE-26 Omaha, Ne. T  
 6-22 Es 2359 KTVQ-2 Billings, Mt. WLIO-35 Lima, Oh.  
 6-23 Es 0005 KRTV-3 Great Falls, Mt. WKLE-46 Lexington, Ky.  
 1329 CKBQ-2 Melfort, Sk. 0829 WTVQ-62 " "  
 1330 CKDS-3 ("Teleforum") WCET-48 Cincinnati, Oh.  
 Yorkton, Sk. W68AA Danville, Il. } 10khz  
 1345 CKCK-2 Regina, Sk. WKMJ-68 Louisville } apart  
 1350 CKSA-2 Lloydminster, At. WDRB-41 "  
 1410 C----5 Mike Douglas show with Roger Moore. 0830 WLKY-32 "  
 6-24 Es 1100 KPRC-2 Houston, Tx. WUAB-43 Lorain, Oh. T  
 Chs. 52, 53, 54, 57?

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Shults; continued---  
 all Kentucky Educ. stns.  
 (ch. 57 in Hazard is  
 suppose to be NBC unless  
 they started carrying educational stuff--wd)  
 6-26 Tr 0855 WBGU-57 Bowling Green, Oh.  
 0859 WIPB-49 Muncie, In.  
 WKSO-29 Somerset, Ky.  
 0900 KCMO-5 Kansas City, Mo.  
 1030 WKZT-23 Elizabethtown, Ky.  
 Es 1600 KUTV-2 Salt Lake City, Ut.  
 2100 KWGN-2 Denver, Co.  
 Tr 2122 WKEN-27 Youngstown, Oh.  
 2200 WAKR-23 Akron, Oh.  
 2201 WLIO-35 Lima, Oh.  
 6-27 Tr 0830 WDHO-24 Toledo, Oh.  
 WGTE-30 "  
 WUAB-43 Lorain-Cleveland  
 0859 WKBD-50 Detroit, Mi.  
 WGPR-62 "  
 0900 WLIO-35 Lima, Oh.  
 Unided-42  
 WBGU-57 Bowling Green, Oh.  
 Es 1100 KUTV-2 Salt Lake City, Ut.  
 1158 CKOS-3 Yorkton, Sk.  
 1159 PBS, ch.3; "Firing Line"  
 1200 KRTV-3 Great Falls, Mt.  
 1300 KID-3 Idaho Falls, Id.  
 KTWO-2 Casper, Wy.  
 KFBB-5 Great Falls, Mt.  
 1355 KWGN-2 Denver, Co.  
 1400 KRTV-3 Great Falls, Mt.

6-27 Es 1730 WUND-2 Columbia, N.C.  
 1900 WESH-2 Daytona Beach T  
 2000 WCBD-2 Charleston, S.C.  
 2130 KWGN-2 Denver, Co.  
 6-28 Tr 1200 KYNE-26 Omaha, Ne.  
 (zero beat w/WCIU)  
 1230 KHNE-29 Hastings, Ne.  
KBIN-32 Council Bluffs  
 (i.d. with KHIN-36)  
 Es 1235 CBFT-2 Montreal, P.Q.  
 1500 KOAI-2 Flagstaff, Az.  
 1659 KBCI-2 Boise, Id.  
 2130 WCBD-2 Charleston, S.C.  
 6-29 Tr 0728 WVIZ-25 Cleveland, Oh.  
 (zero beat w/WEEK)  
 0729 WLIO-35 Lima, Oh.  
 0730 KTSB-27 Topeka, Ks.  
 KEMA-41 Kansas City, Mo.  
 K70ET Kirksville, Mo.  
 (KHQA-7)  
 0739 ~~K7400~~ Marceline, Mo.  
 (WDAF-4)  
 0759 K76CA Marceline, Mo.  
 (KCMO-5)  
 W75AK Jacksonville, Il.  
 (KHQA-7)  
 WAKR-23 Akron, Oh.  
 0800 WOSU-34 Columbus, Oh.  
 WKJG-33 Ft. Wayne, In.  
 WPTA-21 "  
 WCET-48 Cincinnati, Oh.  
 0810 WUAB-43 Lorain-Cleveland  
 0815 WDHO-24 Toledo, Oh.  
 0830 WFIE-14 Evansville, In.  
 0900 WIPB-49 Muncie, In.  
 WPGH-53 Pittsburgh T  
 0910 ----14 Land Mobile stn.  
 in Chicago.  
 1520 WHLA-31 La Crosse, Wi.  
 (WMBD off cause of hail  
 storm & tornadoes)

"The Es and Tropo elements have been in high gear during the last two weeks in June. With the reception of KBIN-32 Council Bluffs I have now logged all of the IEN stations with the exception of the translators. On June 29th I was surprised with the signal strength of 74 & 76 Kansas City xtrs. I do not remember whether I tuned up higher or not but now note that Marceline, Mo. also has a KMBC-9 xtr on 78 according to UHF Xltr Guide. The WVIZ-25 Cleveland t.p. has a ballet-type figure with the word think within the center circle. Does anyone know whether WOUC-44 is on? (They are but with an erratic schedule, or so it seems--wd.) I have been getting 10 khz beat bars on WSNS occasionally or is there another 44 in Mi. or lower Ont? (Not that I know of--wd). Note that WHBF-4 Rock Island carries local news at 11 p.m. CDT rather than midwest customary 10 p.m. CDT (preceded by Gunsmoke at 10 p.m.)"

Frank Wheeler: 6589 Wattsburg Rd., Erie, Pa. 16509 EDT

6-1 Es 1300 KFDK-3 Tx. 4433(1114)	6-7 Es 1330 KCKT-2 Ks. 4422(1015)
1601 KMID-2 Tx. 2322(1394)	1601 KLNE-3 Ne. " (1016)
6-4 Es 1301 KATC-3 La. 4433(1056)	1900 WTHS-2 Fl. 4433(1098)
1305 KENS-5 Tx. " (1363)	1901 WEDU-3 Fl. 5533(994)
1322 KMID-2 Tx. 4434(1394)	2130 WBRZ-2 La. 4433(1020)
1325 KHAS-5 Ne. 4432(946)	6-9 Es 2230 KETS-2 Ar. " (825)
1402 KTBS-3 La. 3432(1005)	6-12 Es 1205 KUSD-2 S.D. " (851)
1501 KFDK-3 Tx. 4432(1114)	1243 KDIX-2 N.D. " (1169)
1600 WDIQ-2 Al. 3432(815)	6-13 Tr 0100 WUHQ-41 Mi. 2345(267)
1601 KPRC-2 Tx. " (1210)	6-16 Es 1550 CJCN-4 Nfld. 4433(1189)
6-7 Es 1000 WBRZ-2 La. 4422(1020)	1630 CBHT-3 N.S. " (804)
1030 KJAC-4 Tx. 4433(1124)	1902 WSAV-3 Ga. " (707)
1300 KQTV-2 Mo. 4422(779)	6-18 Es 1800 CJBR-3 P.Q. 4422(737)
1230 KTEW-2 Ok. 4433(943)	1808 CBFT-2 " 4433(395)
1305 KNOP-2 Ne. 4533(1066)	2330 CKCK-2 Sk. 4433(1322)
1313 KARD-3 Ks. 4422	6-19 Es 0057 CKDS-3 Sk. 4444(989)

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Wheeler; continued---  
 6-20 Es 2100 KNOP-2 Ne. 4422(1066)  
 6-21 Es 1430 KPRC-2 Tx. 4433(1210)  
     1500 KBTX-3 Tx. 4222(1199)  
     1630 KMOL-4 Tx. " (1363)  
     1958 KGFE-2 N.D. 4433(917)  
     2000 KTEW-2 Ok. 4422(943)  
 6-23 Tr 0900 KPNE-9 Ne. " (1066)  
     (a super catch--wd)  
 6-24 Es 1300 KNOP-2 Ne. 4433(1066)  
 6-26 Tr 0230 WNDU-16 In. 2345(318)  
     Es 1100 WPBT-2 Fl. 4433(1098)  
     1040 WMAB-2 Ms. " (840)  
     1102 KPRC-2 Tx. 4522(1210)  
     1230 KETS-2 Ar. 4122(825)  
     1202 KATC-3 La. 4433(1056)  
     1231 KARD-3 Ks. "  
 6-27 Tr 0902 WNDU-16 In. 2345(318)  
     Es 1330 KUSD-2 S.D. 4422(851)  
     1430 KATC-3 La. 4433(1056)  
     1639 KCKT-2 Ks. " (1015) Received--261 Verified--210

"A most fantastic month, the best June ever. Two unusual records for me, the farthest tropo-1066mi. and shortest Es-395mi. KPNE-9 and CHFT-2."

Steve Rich: 707 Carson Ct., Kokomo, In. 46901 EST

5-15 Es 1431 KCKT-2 Great Bend(700) 6-26 Tr 0038 W68AA Danville(85)  
 1435 Unid-5 NBC; West 0137 WFMJ-21 Youngstown(290)  
 1530 KWGN-2 Denver 3233(975) 0223 KMTC-27 Springfield(445)  
 5-18 Es 1105 WTHS-2 Miami(color bars) T 0243 KPLR-11 St. Louis(252)  
 5-21 Es 2246 KWGN-2 Denver 3012(975) 0530 WICZ-40 Binghamton T  
 5-25 Es 1330 KMID-2 Tx.(1025) 0725 CKCN-29 Oil Springs T  
KROD-4(now KDBC-wd) 0740 CKCO-3-42 " "  
     El Paso(1270) 0742 WVIZ-25 Cleveland(245)  
 1430 KTVS-3 Sterling(875) 0745 WUAB-43 " "  
 1434 KOA-4 Denver(975) 0930 KMTC-27 Springfield(445)  
 6-7 Es 2059 KWGN-2 " " 6-27 Es 1130 WEDU-3 Tampa(890)  
 2100 KTVS-3 Sterling(875) 1145 WTVJ-4 Miami(1050)  
 2134 KNOP-2 North Platte(755) 1201 WETV-5 Palm Beach(1030)  
 2200 KNME-5 Albuquerque(1165) 6-28 Es 0012 KARD-3 Wichita(625)  
 KACB-3 San Angelo(1005) 0029 WEAR-3 Pensacola(700)  
 6-17 Tr 2314 KOLR-10 Springfield(445) 0102 KWGN-2 Denver(975)  
 6-18 Es 1950 KTWO-2 Casper T 0112 KNOP-2 North Platte(760)  
     (NBC Mystery Movie on  
     Fri. nite, not Sun.) Tr 0830 Chicago 7,9&11 vy. stng  
 2100 CFCM-4 P.Q. 4224(860) Es 1130 KIII-3 Corp. Chris.(1075)  
 CJBR-3 Rimouski(same prog. 2251 KDIX-2 Dickinson(940)  
     as CFCM) 7-1 Es 1630 WCAX-3 Burlington(715)  
 6-21 Es 1500 KPRC-2 Houston(885) 7-7 Es 1729 KPRC-2 Houston(885)  
     KIII-3 Corpus Christi(1075) 1730 KBTX-3 Bryan(875)  
 1659 KRGV-5 Weslaco Tx.  
 1700 KMOL-4 San Antonio(1025) Log total: 163

"June 26 and 27 were very productive for dxing. Strong Tr on 26 and strong Es from Florida on 27th. On 26 I called WICZ to verify signal but, unfortunately, the answering service answered the call and she didn't even know if the transmitter was on!"

Rod Louma: 38540 Five Mile Rd., Livonia, Mi. 48154 EDT

6-18 Tr 0545 CBLT-5 Toronto, On. 6-23 Tr 0820 CICA-19 Toronto, On.  
 CFTO-9 " 0822 CICO-58 Chatham, On.  
 0546 WBEM-2 Chicago, Il. 0824 CBLFT-1-76 Kitchener, On.  
 Es 1700 CRHT-3 Halifax, Ns. 0825 Ft. Wayne U's  
 1800 CJBR-3 Rimouski, P.Q. (new province) 0830 WHMB-40 Indianapolis, In.  
 6-21 Es 1720 KBTX-3 Bryan, Tx. 0831 WXIX-19 Cincinnati, Oh.  
 1725 Unid-5 "Tom Vincent Chev." ad. 0832 CICO-18 London, On.  
 6-23 Tr 0820 CBLFT-25 Toronto, On. 0835 Youngstown U's

Central Tv-Dx

Aug. 1976

Louma; continued---  
 6-23 Tr 0834 WOSU-34 Columbus, Oh.  
 6-27 Es 0040 CJCH-5 Halifax, N.S.  
 CBHT-3 " T  
 ( color bars and pulsing tone)  
 1140 WPTV-5 Palm Beach, Fl.  
 Unid-6 South 7-7 Tr 2100 CICO-32 Windsor, Ont.

6-27 Es 1141 WEDU-3 Tampa, Fl.  
 Uniteds on chs. 2&4.  
 2100-2235 Tv so loaded up that I went to F.M. for a while.  
 Logged WPCS 89.3, WMCU 89.7,  
 WGYL 93.5 & WGMW 94.3  
 2200 WUFT-5 Gainesville, Fl.  
 2230 WPTV-5 Palm Beach, Fl.

"Oh, also while in a supermarket parking lot on 6-27 I logged KSUC on FM, not in my books, located in a town called Keane, no state given. This on a Mercury Montego FM car radio." (You heard KSUC-88.3 in Keane TX. -CWI)

Scott Samson: 1025 14th Ave. A, Orion, Il. (309)-526-8265 CDT 61273  
 5-18 Es 0940 Global-2 6-23 Es 1357 CKCK-2 Regina, Sk.  
 1000 Spanish unid-2 6-24 Es 1159 Unid-2; ad for "The Omen"  
 5-19 Tr 0000 Chicago, Peoria, showing at the World  
 Rockford U's all in Theatre.  
 on UHF loop.  
 5-23 Es 1730 KNID-2 Midland, Tx. 6-25 Es 1129 KOAI-2 Flagstaff, Az.  
 1738 United Spanish-2 6-26 Es 1430-1630 Uniteds on chs. 2&3  
 1816 Texas Rangers baseball 6-27 Es 1130 WESH-2 Daytona Beach, Fl.  
 on ch. 2(I know KPRC carries them--wd) CKCK-2 Regina, Sk.  
 5-26 Es 1300 CHBQ-2??? Not listed 1220 KDIX-2 Dickinson, N.D.  
 in station guide.(Not WUND-2 Columbia, N.C.  
 in any of my books--wd) 1227 WDIQ-2 Dozier, Al.  
 (Mabey CKBQ-2--wd) 1300 WEDU-3 Tampa, Fl.  
 5-28 Es 1353 United ch. 2; "Perry Mason" United-2; "Nashville on the  
 1400 KWGN-2 Denver, Co. Road"  
 6-3 Es 1335 WTHS-2 Miami, Fl. 1330 WESH-2 had their usual in-  
 6-5 Es 1323 Uniteds on chs. 2&3 terference message  
 1330 KETX-3 Bryan, Tx. on the screen.  
 KBVD-2????????? 1400 KWGN-2 Denver, Co.  
 KFDX-3 Wichita Falls, Tx. 1415 United-2; ad for "Cinema 2"  
 1400 KMID-2 Midland, Tx. 1427 WCBD-2 Charleston, S.C.  
 1530 WBRZ-2 Baton Rouge, La. 1530 WMAR-2 Baltimore, Md.  
 KATC-3 Lafayette, La. 1600 KTWO-2 Casper, Wy.  
 6-6 Es 2126 KMID-2 Midland, Tx. KID-3 Idaho Falls, Id.  
 6-7 Es 1230 " " Es, Tr-2000 semi-locals 5,7,9,10,13;  
 WGBH-2 Boston, Ma. unideds chs. 2&3. Es: FM  
 1330 CHFT-2 Mont Laurier, P.Q. Bamberg S.C. 92.7; CBers  
 1430 KCKT-2 Great Bend, Ks. from Tupelo, Ms.; Tr: U's  
 1452 KWGN-2 Denver, Co. from Champaign, Decatur,  
 1537 KTWO-2 Casper, Wy. Peoria, Rockford, Chicago,  
 1600 KPRC-2 Houston, Tx. S.Bend, all off of a VHF  
 1611 KIII-3 Corpus Christi, Tx. CM lo-band ant.  
 6-8 Es 1202 United-2; ID slide with letters 6-28 Es 1235 Global-2  
 "itv" in the center and something written on the WTHS-2 Miami, Fl.  
 left hand side of the slide. 1330 CBFT-2 Montreal, P.Q.  
 2000 WPBT-2 Miami, Fl. 1400 United-2; ad for "Harlem  
 6-11 Es 2150 WGBH-2 Boston, Ma. Globetrotters" in town  
 6-18 Es 1718 WESH-2 Daytona Beach, Fl. June 28-30.  
 1830 United-2; French 7-1 Es 1100 WBRZ-2 Baton Rouge, La.  
 " "; heard WTHS-2 Miami, Fl.  
 Foxboro mentioned. WESH-2 Daytona Beach, Fl.  
 1845 WLBY-2 Bangor, Me. 7-5 Tr 0800 Chicago U's, Peoria, Rock-  
 6-20 Es 2120 KWGN-2 Denver, Co. ford, Springfield, Decatur-  
 6-21 Es 1130 WESH-2 Daytona Beach, Fl. U's  
 WEDU-3 Tampa, Fl. KDN-11 Des Moines, Ia.  
 1500 KPRC-2 Houston, Tx. KHIN-36 Red Oak, Ia.  
 WBRZ-2 Baton Rouge, La. WISN-12 Milwaukee over KIIN  
 1620 KATC-3 Lafayette, La. local.  
 Tr 2100 WCFC-38 Chicago, Il. "The Es has been fairly consistent  
 Es 1354 Unid-2; gave phone no. thus far this summer, with a little  
 527-9696 for Met Pharmacy tropo thrown in, too. A beautiful  
 in Met Theatre Building. example came at 2000 on June 27,

Sampson; continued---

when both Es and tropo were in very heavily. The Es reached at least to the middle of the FM band, as weak-powered WWBD-FM, 92-7, Bamberg, S.C., came in over powerful semi-local KFMD-FM at 92.9. I'm sure other FM skip was there, but this was the only ID I received. Right now, our UHF setup is out of order, so I've temporarily hooked up our Channel Master VHF low-band antenna for use in tropo openings. It's not quite up to the old Parapro, but it's better than nothing at all."

R.W. Lord: 4129 N. Bell Ave., Chicago, Il. 60618 CDT

5-15 Es 1232 KDFW-4 Dallas(800)	6-18 Es 1739 CFCM-4 Quebec City(?)
1235 KENW-3 Portales(1000)	1805 CHSJ-4 St. John(1235)
1340 KAMR-4 Amarillo(885)	1807 WCSH-6 Portland(880) T
5-25 Es 1235 KIII-3 Corpus Christi(1120)	1813 CJPM-6 Chicoutimi(910)
1246 XEFB-3 Monterrey(1320)	2305 CKOS-3 Yorkton(950)
1257 KMOL-4 San Antonio(1055)	6-19 Es 1200 KOTA-3 Rapid City(795)
1345 KFDX-3 Wichita Falls(805)	1203 KGBT-4 Harlingen(1225)
6-1 Es 1330 CFBN-3 Edmonton T	1220 XEFB-3 Monterrey(1320)
1332 XEFB-3 Monterrey(1320)	1300 KIII-3 Corp. Chris.(1120)
1342 KFDX-3 Wichita Falls(805)	1358 KATC-3 Lafayette(845)
6-4 Es 1110 KATC-3 Lafayette(845)	1600 KMOL-4 San Antonio(1055)
1128 KACB-3 San Angelo(1005)	1635 KENW-3 Portales(1000)
1140 KBTX-3 Bryan(910)	1124 " "
1155 KMOL-4 San Antonio(1055)	1430 XEFB-3 Monterrey(1320)
1200 WWL-4 New Orleans(830)	6-27 Tr 0535 WNEM-5 Bay City(225)
1230 KJAC-4 Port Arthur(885)	Es 1235 KXLF-4 Butte(1265)
1400 KDFW-4 Dallas(800)	1345 KID-3 Idaho Falls(1225)
KENW-3 Portales(1000)	1452 KRTV-3 Great Falls(1215)
1459 KATC-3 Lafayette(845)	1458 KOTA-3 Rapid City(795)
6-6 Es 1728 KMOL-4 San Antonio(1055)	1730 KIII-3 Corp. Chris.(1120)
1730 KBTX-3 Bryan(910)	1835 KENW-3 Portales(1000)
1830 KENW-3 Portales(1000)	1958 KMOL-4 San Antonio(1055)
1900 KDBC-4 El Paso(1235)	2200 KBTX-3 Bryan(910)
6-7 Es 1610 XEFB-3 Monterrey(1320)	1300 KMOL-4 San Antonio(1055)
1615 KMOL-4 San Antonio(1055)	2100 KENW-3 Portales(1000)
1855 KID-3 Idaho Falls(1225)	6-29 Es 0048 KRTV-3 Great Falls(1215)
1905 KBTX-3 Bryan(910)	0115 KOA-4 Denver(910)
1908 KMOL-4 San Antonio(1055)	0200 KOTA-3 Rapid City(795)
1930 KENW-3 Portales(1000)	7-1 Tr 0253 KMOX-4 St. Louis(265)
2000 WWL-4 New Orleans(830)	7-4 Tr 0445 WBAY-2 Green Bay(180)
2200 KDBC-4 El Paso(1235)	WNEM-5 Bay City(225)
6-16 Es United ch. 4; French @ 1735	0502 KMOX-4 St. Louis(265)
1740 WFSB-3 Hartford, Ct.(760)	0507 KPLR-11 " "
1754 CJBR-3 Rimouski(1035)	0525 WJBK-2 Detroit(235)
6-18 Es 1730 " "	0535 KSD-5 St. Louis(265)
	0550 WWJ-4 Detroit(235)

Log now at: 175 Question: Does anyone know which ch. 4 non-educational in Texas broadcasts Sesame Street? (Yes, KGBT-4 Harlingen TX has it. -CWI)

Don Ruland: 4448 68th Place, Kenosha, Wi. 53140 CDT

6-18 Es 1730 CJBR-3 Rimouski(1020)	6-27 Tr 0516 WOWK-13 Huntington(420)
1800 WBZ-4 Boston(850)	0520 WDCA-20 Washington(630)
WC VB-5 " "	0523 WLEX-18 Lexington(360)
1830 CHAU-5 Carleton(1160)	WHIZ-18 Zanesville( )
6-20 Es 2200 WEDU-3 Tampa(1070)	0525 WHIS-6 Bluefield(520)
6-25 Tr 0600 WLKY-32 Louisville(330)	0528 WIIC-11 Pittsburgh(430)
0630 WEHT-25 Evansville(320)	0529 WENS-10 Columbus(320)
0646 WFIE-14 " "	0530 WSTV-9 Steubenville(410)
W68AA Danville(170)	0545 WKYC-3 Cleveland(330)
0650 WOSU-34 Columbus(320)	0547 WCHS-8 Charleston(430)
0715 WDRB-41 Louisville(330)	0553 WPGH-53 Pittsburgh( )
6-26 Tr 0545 WXIX-19 Cincinnati(300)	0555 WTVT-33 Youngstown(380)
0600 WCPO-9 " "	WUAB-43 Lorain(310)
0630 KMT-27 Springfield(470)	0600 CBLFT-2-40 London(340)
WLEX-18 Lexington(360)	CBLFT-3-48 Chatham(280)
0640 KEMA-41 Kansas City(430) T	WQBX-16 Pittsburgh T
0645 WLKY-32 Louisville(330)	0605 WAKR-23 Akron(340)
WAKR-23 Akron(340)	Es 1700 KATC-3 Lafayette(900)

Ruland; continued---  
 6-27 Es 1800 WTVJ-4 Miami(1250) 7-6 Tr 0725 WVIZ-25 Cleveland(330)  
   2000 WSAV-3 Savannah(830)      CICO-32 Windsor(250)  
 6-28 Tr 0550 WJET-24 Erie(400) 0740 WJET-24 Erie(400)  
   WSEE-35 " " 7-7 Tr 0700 WOSU-34 Columbus(320)  
   CICO-59 Chatham(280)      0725 WVIZ-25 Cleveland(330)  
   Es 2320 KRTV-3 Great Falls(1180) 7-8 Tr 1800 W55AE Manistique(250)  
 6-29 Tr 0645 WOSU-34 Columbus(320) 7-9 Tr 0625 WPGH-53 Pittsburgh(430)  
 7-2 Tr 0658 CICO-18 London(340) 0630 WKBN-27 Youngstown(380)  
   0705 WJET-24 Erie(400)      WHIZ-18 Zanesville(360)  
   WSEE-35 " "      WAKR-23 Akron(340)  
 7-4 Tr 0700 WLEX-18 Lexington(360) 0645 WXIX-19 Cincinnati(300)  
   WKYI-27 " "      WLKY-32 Louisville(330)  
   WLKY-32 Louisville(330)      WOSU-34 Columbus(320)  
 7-5 Tr 2300 W55AE Manistique(250) 0720 WVIZ-25 Cleveland(330)  
 7-6 Tr 0630 " " " Log total now at: 416

Paul Gaines: 15920 Puritan St., Detroit, Mi. 48227 EDT  
 Due to the length of this report I have taken the liberty of editing it.  
 Stations from Toronto, Chicago, Milwaukee & Indianapolis are left out. They  
 are seen every day, almost.--wd

6-9 Tr 0153 WCPO-9 Oh. 1022(235) 6-17 Tr 2313 WTAP-15 W.Va. 1122(235)  
 0853 WLFI-18 In. 3555(220) 6-18 Tr 0143 WCPO-9 Oh. 1522(235)  
 0918 WKRC-12 Oh. 1531(235) 0117 WKRC-12 " 1521 "  
 2341 WUTV-29 N.Y. 1031(215) 0148 WIIC-11 Pa. 2542(210)  
 6-10 Tr 0754 WNED-17 N.Y. 1542(215) 0246 WHEN-4 N.Y. 1542(215)  
 0829 WPGH-53 Pa. 1122(210) 6-20 Tr 2338 CBLFT-3-48 Ont. 3055(50)  
 0854 WTAP-15 W.Va. 1022(235) 0148 WIIC-11 Pa. 3555 "  
 6-11 Tr 0311 WHEN-4 N.Y. 1532(215) 6-21 Ms 0227 KOA-4 Co. 2522(1125)  
 Ms 0418 WCBS-2 N.Y. 1212(490) 0339 WCBS-2 N.Y. 1512(490)  
 6-12 Tr 0305 WTAE-4 Pa. 1522(210) Es 1325 KIII-3 Tx. 4522(1280)  
 Ms 0418 WCBS-2 N.Y. 1112(490) 1424 KATC-3 La. " (970)  
 Tr 0628 WCPO-9 Oh. 1522(235) 1525 KBTK-3 Tx. 2521(1070)  
 0640 WLWT-5 Oh. 1031 " 1625 KRGV-5 Tx. " (1380)  
 0810 WGTU-29 Mi. 2522(205) 1645 KRIS-6 Tx. 4521(1280)  
 2305 WPGH-53 Pa. 1532(210) 1724 KENS-5 Tx. " (1220)  
 2324 WUTV-29 N.Y. 1031(215) 6-22 Ms 0413 WCBS-2 N.Y. 2112(490)  
 2337 WNED-17 N.Y. 1022 " 6-24 Ms 0204 WNEW-5 " 2012 "  
 2339 W46AB N.Y. 1022(180) 0514 WCBS-2 " 1012 "  
 6-13 Tr 0018 WTAP-15 W.Va. 1232(235) 6-25 Ms 0320 " " 1112 "  
 0056 Unid-19 East 6-26 Ms 0434 " " 1012 "  
 0207 WCPO-9 Oh. 1022(235) Es 2237 KIII-3 Tx. 4521(1280)  
 0209 WKRC-12 Oh. " " 2335 KARD-3 Ks. " (810)  
 0215 WIIC-11 Pa. 1222(210) 6-27 Es 2300 WPTV-5 Fl. 4511(1110)  
 0257 WTAE-4 Pa. 1122(210) 6-28 Es 0005 WKRG-5 Al. 5521(855)  
 0350 WLWT-5 Oh. 1122(235) 0134 KENS-5 Tx. 4521(1220)  
 Ms 0407 WCBS-2 N.Y. 1212(490) 0136 KXAS-5 Tx. " (1000)  
 Tr 0408 WSAU-7 Wi. 2542(360) 0155 KTVE-4 Ok. " (995)  
 6-14 Tr 0148 WCPO-9 Oh. 1522(235) 0200 KOAA-5 Co. 4522(1145)  
 Ms 0333 WCBS-2 N.Y. 1012(490) 0227 KDFW-4 Tx. 4521(985)  
 Tr 0908 WNED-17 " 1022(215) 0232 KOA-4 Co. " (1125)  
 6-15 Tr 0151 WTRF-7 W.Va. 1222(205) 0237 KYCU-5 Wy. 4022(1090)  
 0157 WIIC-11 Pa. 1022(210) Ms 0347 WCBS-2 N.Y. 1012(490)  
 Ms 0219 WNEW-5 N.Y. 4012(490) Es 2315 WLFT-3 Ms. 2511(790)  
 0355 WCBS-2 " 1012 " 2330 KFDX-3 Tx. " (1000)  
 Tr 0617 WCPO-9 Oh. 1522(235) 2342 KATC-3 La. " (970)  
 0625 WKRC-12 Oh. 1322(") 6-29 Es 0046 KXAS-5 Tx. 1531(1000)  
 0635 WOwk-13 W.Va. 1021(280) 0243 KOA-4 Co. 5022(1125)  
 6-16 Tr 0145 WTRF-7 " 1022(205) 0317 KDUH-4 Ne. 1022(975)  
 Ms 0455 WCBS-2 N.Y. 1012(490) Tr 2252 CBLFT-1-76 Ont. 4532(140)  
 6-17 Tr 0127 WKRC-12 Oh. 1022(235) 7-1 Ms 0356 WCBS-2 N.Y. 1012(490)  
 0149 WKW-7 N.Y. 1021(215) Es 1430 KTBS-3 La. 2522(905)  
 0150 WCPO-9 Oh. 1522(235) 1458 WRBL-3 Ga. 1322(695)  
 0155 WTRF-7 W.Va. " (205) 1600 KFDX-3 Tx. 2522(1000)  
 0158 WIIC-11 Pa. 1222(210) 1634 KARD-3 Ks. 3522(810)  
 0248 WHEN-4 N.Y. 1512(215) 0240 WCBS-2 N.Y. 1022(490)  
 0901 WPGH-53 Pa. 1022(210)

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Gaines; continued---  
 7-7 Ms 0406 WCBS-2 N.Y. 1012(490)  
 7-8 Ms 0412 " " 1112 "  
 7-5 Tr 0909 CICO-32 Ont. 5055(30)  
 7-6 Ms 0345 WCBS-2 N.Y. 1012(490) Log total: 254

I took furthur liberties of editing this report after 6-18 by eliminating all of the tropes (with the exception of new loggings). If you want to know what I left out take a look at the tropo loggings from the beginning; the ones I deleted were the same, seen every day. If I were to have typed up the complete report it would have covered over 4 pages. Seeing as how this is the peak time of the year for dx, the reports are long and numerous and I don't have that much spare time.--wd

Jim Gould: R.R.#3, Kokomo, In. (317)-452-9585 EST

6-12 Tr 0642 KMEC-9 Mo. 5523(458)	6-26 Es 1655 KDBC-4 Tx., El Paso(1316)T
0648 KTSB-27 Ks. 3524(510)	2000 KLNE-3 Ne., Lexington
0705 KBMA-41 Mo. 3524(458)	2100 KWGN-2 Denver(1000)
6-13 Tr 1911 WOFC-38 Il. 5555(130)	KTWO-2 Casper(1090)
2200 KOLR-10 Mo. 4532(445)	6-27 Tr 0706 CBLFT-3-48 Ont. 4535(?)
Es 2231 KMID-2 Midland(1087)	0726 CBLFT-1-76 " 2525(350)
6-14 Tr 0809 WHD-13 Ia. (390)	(CBLFT-2-40 same offset as WHMB-40)
2220 KOLR-10 Mo. 4522(445)	0800 WAAY-31 Al. 2523(410)
6-16 Es 1716 CJBR-3 Rimouski(1020)	Es 1105 Into Fl. ch. 6 deep
1746 WGBH-2 Boston(680)	1230 WTVJ-4 Fl., Miami(1090)
6-17 Tr 0714 KOLR-10 Mo. 5531(445)	1331 WPTV-5 Palm Beach(1015)
KMTC-27 Mo. 3523 "	1359 WEDU-3 Tampa(925)
(KOLR in & out w/snow free signal all evening)	1431 KDUH-4 Hay Springs(900)
6-18 Es 1710 WGBH-2 Boston(680) T	KOTA-3 Rapid City(940)
1725 CHAU-5 Carleton(1141)	1502 KCKT-2 Great Bend(695) T
1730 CJBR-3 Rimouski(1020)	1700 KRGV-5 Weslaco(1210)
1800 CFQM-4 Quebec City(854)	1900 WUFT-5 Gainesville(800)
CBAFT-5 Chibaugamau(855)7-3 Tr Des Moines, Ames V's under locals	
(The WFTDA Station Guide 7-4 Es 1220 XHY-3 Merida(1350)	
says CBFAT--wd)	May be double hop activity. Ch
1900 XHY-3 Merida(1350) T	2 contains 2 Spanish stations
2Es?2000 XEZ-3 Cerro Del Zamorano(1500+)	due South to SSW. Not Cuba,
Es 2100 CBHT-2 Montreal(715)	ch.3 has an additional Spanish
6-19 Es 0559 CKCW-2 Moncton(1125)	station in same general direction
CJCH-5 Halifax(1170)	as Merida.
6-20 Tr 0642 CICO-28 Caledonia(1100)	1600 XEFE-2 Nuevo Laredo(1190)
0648 CBLFT-2-40 Ont. 2535(300)	2Es 1743 CEC-TV-3 Bridgetown, Barba-
0653 CICO-18 " 3534( " )	dos(2500) SE, vertical frequency
0700 Globals on chs.22&29	significantly differently from
Es 1000 WPBT-2 Miami(1090)	any other station(bad vertical
1700 CJCB-4 Sydney(1240)	rolling). Station is English,
1758 CKCW-2 Moncton(1125)	with an old Jimmy Durante movie.
1800 CBHT-3 Halifax(1170)	Heavy multipath reception. I.D.
2102 KWGN-2 Denver(1000) T	as "CBC Color Television Barbados"
6-21 Es 1700 Intense Es to Tx; ch.6 deep.	The Waltons at 1805. 1810 condx
6-25 Tr 0805 KRIN-32 Ia. 5535(320)	starting to fade. Checked CBC-3
0808 KYNE-26 Ne. 2535(515) T	on my color set and found no
Canadians chs.28, 40&42	audio while audio on my dx set
0815 KHNE-29 Ne. 3535(642)	was excellent. This might mean
0834 KHIN-36 Ia. 2535(473)	CBC-3 uses something other than
KSIN-27 Ia. 0323(540)	4.5mhz for intercarrier audio.
Es 1830 Tele Rebelde-3(1300)	1823 Tele Rebelde-3 Cuba.
1900 WPBT-2 Miami(1090)	1827 CEC-TV-3 last seen
6-26 Tr 0036 WTVK-26 Tn. 4525(346)	7-5 Tr 0808 CICO-32 Ont. 3024(?)
0100 KMTC-27 Mo. 5533(445)	Further comments on CBC-TV-3:
Snow free signals from	According to Television Factbook
Kitchener, Pittsburgh, &	all of the stations listed in the
Springfield, Mo.	WFTDA Station Guide use the U.S.
0643 KHNE-29 Ne. 4533(642)	Tv Standards, except for CBC-3
0645 KYNE-26 Ne. 2534(515)	which uses 625 lines & 50 cycles
0649 KBMA-41 Mo. 5531(458)	vertical frequency(U.S. 525 & 60
0900 CICO-59 Ont.	which means the vertical hold
Es 1100 WPBT-2 Miami, Fl.	will need adjusting to sync. px.

William J. Draeb; Ellis St., R.R.#2, Kewaunee, WI, 54216 CDT  
 6-18 Es 1705 WLBZ-2 Bangor(925) 6-27 Tr 0625 WKEF-22 Dayton(368)  
 CHSJ-4 St. John(1085) WPGH-53 Pittsburgh(480)  
 WABL-5 Bangor(925) WYTV-33 Youngstown(420)  
 CJCH-6 Caledonia(?) 0629 WKEN-27  
 1730 CJBR-3 Rimouski(951) 0635 CBLFT-3-48 Chatham(278)  
 1752 CHSJ-6 Bon Accord(?) 0702 CBLFT-2-40 London(328)  
 CFCH-4 Quebec City(803) Es 1115 KWAB-4 Big Spring(1135)  
 1912 WNBC-4 New York(740) KENW-3 Portales(1103)  
 WBZ-4 Boston(830) KMID-2 Midland(1176)  
 WCWB-5 " " KAMR-4 Amarillo(991)  
 WGBH-2 " " 1200 KTWO-2 Casper(947)  
 WFSB-3 Hartford(767) KTWS-3 Sterling T  
 WCBS-2 New York(740) KOA-4 Denver T  
 WNEW-5 " " KWGN-2 "  
 1935 WCSH-6 Portland(855) KRMA-6 "  
 2305 CKSA-2 Lloyminster(1175) KID-3 Idaho Falls(1214)  
 CKOS-3 Yorkton(838) 1242 United-3; blank raster  
 CKBI-3 Greenwater Lake(?) 1500 WSAV-3 Savannah(933)  
 CKBI-5 Prince Albert T 1504 WSB-2 Atlanta(768)  
 CHSS-6 Wynyard(?) 1512 WTYY-4 Dothan(934)  
 6-19 Es 0040 CFAC-2 Calgary(1310) WCTV-6 Thomasville T  
 CFCN-4 " " 1528 WWAY-3 Wilmington(882)  
 0100 CFQC-2 N.Battleford T WECT-6 "  
 CFQC-1 Stranraer T WCBD-2 Charleston(916)  
 CKBQ-2 Melfort T WCIV-4 "  
 6-20 Es 2015 WEAR-3 Pensacola(986) WCSC-5 "  
 6-21 Es 1115 KIII-3 Corpus Christi(1295) 2Es 1540 WAPA-4 San Juan(2185)  
 KMID-2 Midland(1176) Lasted until 1548; returned at  
 KPRC-2 Houston T 1700 much stronger and lasted  
 KMOL-4 San Antonio T until 1745. The audio was much  
 KGBT or KDFW T better than pix; at times audio  
 1640 WEAR-3 Pensacola(986) produced full quieting. Saw a  
 WDIQ-2 Dozier(925) local news or talk program and  
 KJAC-4 Port Arthur T a number of local commercials.  
 1703 KMOL-4 San Antonio T After they disappeared Fl.  
 6-23 Tr 0535 CFTO-9 Toronto(410) stations came bombing in.  
 CKCO-13 Kitchener(345) Es 1800 WJXT-4 Jacksonville(1039)  
 0538 WBNS-10 Columbus(395) WDBO-6 Orlando T  
 0550 CKSO-5 Sudbury(350) 1825 WPTV-5 Palm Beach(1305)  
 Es 1410 KREM-2 Spokane T WPBT-2 Miami T  
 KXLY-4 " " WTVJ-4 "  
 CFAC-2 Calgary " WCIX-6 "  
 6-25 Es 2020 WDIQ-2 Dozier(925) WEDU-3 Tampa(1192)  
 WRBL-3 Columbus(853) 2100 WEAR-3 Pensacola(986)  
 2031 WEAR-3 Pensacola(986) WKRG-5 Mobile(967)  
 2100 KATC-3 Lafayette(1026) 2201 WUFT-5 Gainesville(1071)  
 WWL-4 New Orleans T (color bars)  
 WBRZ-2 Baton Rouge(1002) 2305 Es thru ch.6 from Fl.; I  
 6-26 Tr 0805 United-20; SE Ø offset went to bed.  
 Es 1130 WDIQ-2 Dozier T 6-28 Tr 0500 CFTO-9 Toronto(410)  
 WEDU-3 Tampa(1192) CKCO-13 Kitchener(345)  
 United-2; blank raster, 0519 WKBW-7 Buffalo(445)  
 out of sync horiz.; S. Es 1200 KATC-3 Lafayette(1026)  
 1155 WEAR-3 Pensacola T 1600 WCBD-2 Charleston(916)  
 WPBT-2 Miami T WCIV-4 "  
 1210 WESH-2 Daytona Beach(1130) WUNC-4 Chapel Hill(749)  
 1230 WCBD-2 Charleston(916) WWAY-3 Wilmington(882)  
 1244 WCIV-4 " " 1615 WEDU-3 Tampa(1192)  
 WTYY-4 Dothan T WSB-2 Atlanta(768)  
 1935 WERZ-2 Baton Rouge(1002) 1658 WJXT-4 Jacksonville(1039)  
 KATC-3 Lafayette(1026) 1815 WSAV-3 Savannah(933)  
 KMOL-4 San Antonio T 2120 WCSC-5 Charleston(916)  
 KENS-5 " " 2143 WESH-2 Daytona Beach(1130)  
 2225 KAMR-4 Amarillo T 2152 WHTS or WPBT T  
 2245 KWAB-4 Big Spring T WUFT-5 Gainesville(1071)  
 2315 KMID-2 Midland T 2201 WDSU-6 New Orleans(1028)  
 6-27 Tr 0625 WAKR-23 Akron(380)

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Draeb; continued---

6-28 Es 2201 WWL-4 New Orleans T	7-7 Es 1300 KMID-2 Midland(1176)
WBRZ-2 Baton Rouge T	KACB-3 San Angelo(1143)
KALB-5 Alexandria T	KWAB-4 Big Spring(1135)
WKRG-5 Mobile(967)	1700 KATC-3 Lafayette(1026)
WEAR-3 Pensacola(986)	1715 KJAC-4 Port Arthur(1080)
2207 WCTV-6 Thomasville(972)	1722 KALB-5 Alexandria T
2211 WDBQ-6 Orlando(1164)	1724 WBRZ-2 Baton Rouge(1002)
2226 WTVY-4 Dothan(934)	KPRC-2 Houston(1118)
2230 WRBL-3 Columbus(853)	KDFW-4 Dallas(957)
2308 WMAB-2 State College(784)	KXAS-5 Ft. Worth(972)
2325 KJAC-4 Port Arthur(1080)	KMOL-4 San Antonio(1213)
2336 KTBS-3 Shreveport(910)	1820 KFDM-6 Beaumont T
KTAL-6 Texarkana(848)	KTAL-6 Texarkana T
6-29 Es 0000 KFDX-3 Wichita Falls(945)	0635 WYTV-33 Youngstown(420)
0002 KXLF-4 Butte(1219)	WJET-24 Erie(405)
0007 KFBB-5 Great Falls(1159)	0642 WOSU-34 Columbus(395)
KTVM-6 Butte(1219)	0646 CICO-28 Kitchener(345)
0010 CFCN-4 Calgary(1310)	0700 CICO-18 London(328)
CFAC-2 " T	0725 Evansville U's(420)
0029 KID-3 Idaho Falls(1214)	0730 WTIU-30 Bloomington(376)
0034 KAID-4 Boise T	WLKY-32 Louisville(437)
0040 KOA-4 Denver(952)	WXIX-19 Cincinnati(400)
KOB-4 Albuquerque T	WDRB-41 Louisville(437)
0100 KDUH-4 Hay Springs(767)	0745 WVUT-22 Vincennes(405)
0107 KOAA-5 Pueblo T	2005 CHFD-4 Thunder Bay(300)
KYCU-5 Cheyenne T	1728 KDFW-4 Dallas(957)
0200 Es thru ch.5; I went to bed.	1737 KXAS-5 Ft. Worth(972)
7-1 Es 1200 WCBD-2 Charleston(916)	KPRC-2 Houston T
WCIV-4 " " 7-12 Tr 0445	KJAC-4 Port Arthur T
WCSC-5 " "	KETX-3 Bryan T
1210 WESH-2 Daytona Beach(1130)	KMID-2 Midland T
WSAV-3 Savannah(933)	WKRC-12 Cincinnati(400)
1229 WEDU-3 Tampa(1192)	CBFOT-1-12 Kapuskasing T
1600 KETX-3 Bryan(1079)	CBFST-1-13 Sudbury(350)
7-2 Tr 0735 Youngstown U's(420)	CKCO-13 Kitchener(345)
WPGH-53 Pittsburgh(480)	0500 WHIO-7 Dayton(368)
WVIZ-25 Cleveland(355)	0815 WLKY-32 Louisville(437)
WHIZ-18 Zanesville(400)	WKEP-15 "
0800 CICO-59 Chatham(278)	WXIX-19 Cincinnati(400)
0823 WOSU-34 Columbus(395)	WHIZ-18 Zanesville( " )
WGSF-31 Newark(398)	WTIU-30 Bloomington(376)
7-4 Tr 0608 WXIX-19 Cincinnati(400)	WHMB-40 Indianapolis(336)
CNY-10 North Bay T	WVUT-22 Vincennes(405)
CKNC-9 Sudbury(350)	WKYT-27 Lexington(473)
CKNC-1-7 Elliot Lake(270)	WLEX-18 "
WLKY-32 Louisville(437)	0825 WDRB-41 Louisville(437)
0645 WEHT-25 Evansville(420)	0828 WKEF-22 Dayton(368)
0648 WFIE-14 " "	2130 WMUL-33 Huntington(498)
0840 CBLFT-2-40 London(328)	2142 Youngstown U's(420)
CICO-18 " 7-13 Tr 0800	2227 WLIL-38 Terre Haute(348)
WJET-24 Erie(405)	(WPNE off at 2220)
0630 WLKY-32 Louisville(437)	WHNT-19 Huntsville(685)
0830 CICO-32 Windsor(270)	WXIX-19 Cincinnati(400)
WUAB-43 Lorain(340)	WAAY-31 Huntsville(685)
WAKR-23 Akron(380)	WYUN-48 "
WOSU-34 Columbus(395)	(ex-WMSL)
CICO-18 London(328)	WCET-48 Cincinnati(400)
WJET-24 Erie(405)	WTVK-26 Knoxville(626)
WSEE-35 " "	Lexington U's(except ch.46)
WPGH-53 Pittsburgh(480)	WZTV-17 Nashville T
7-6 Tr 2315 Youngstown U's(420)	WTIU-30 Bloomington(376)
(ch.33 Tent.)	WLKY-32 Louisville(437)
WPGH-53 Pittsburgh(480)	WDRB-41 "
WTIU-30 Bloomington(376)	Evansville U's(420)
Clevend area U's(355)	WVUT-22 Vincennes(405)
2353 WJET-24 Erie(405)	WBMG-42 Birmingham(768)
WSEE-35 " "	(continued next month)
	Other new ones seen this month
	CBEFT-78 Windsor & CBLFT-1-76 Kitchener.

# **WESTERN TV-DX**

August 1976

As the deadline dates indicate, this is this editor's last Western TV-DX column. Next month, Doug Everitt becomes your Western TV-DX editor. It was thought that Doug might change address soon, but this is to be his address for the foreseeable future.

Dennis Park Smith  
50 Manzanita Way  
Paradise, California 95969  
Telephone 916-877-2975  
Final deadline for above  
address was 10 July

DX in June was captured almost entirely by sporadic-E skip loggings. There was very little tropo—none of any consequence. Meteor-scatter DX found a bit of loggings here and there. But, Es was big. It was quite intense at times, with some openings well after midnight and even occasionally in the wee hours. Yes—Es usually occurs at the times we are familiar with, but it is known that it can take place any time. The MUF got high enough at times (with enough intensity and shorter skip distances on ch. 6 and FM) to prompt some to check ch. 7 and up. Yes—it happened again—high-band Es. It was apparently for only a few minutes on 14 June, and only one reporter was rewarded with seeing it (Steven Wiseblood) with Oklahoma through ch. 9 observed in California.

The Es chart for June shows no aurora DX reported this time, but Es itself occurred (above 54 MHz) every day except the 23rd. This chart is based on local standard time. Two reports this time contain some May loggings; if desired, these may be added to the May Es chart in last month's column.

am aft eve midn+ am aft eve am eve am aft eve am aft eve am aft eve am

Date 1976 Jun 1 1 1 3 3 3

[As might be guessed, the "4" on my typewriter was not working before. I added them afterward by hand, but missed some in June VUD, p.30 top right column, times.]

After this month, your Western TV-DX editor will be: Doug Everitt  
1708 W. Maine Avenue  
Enid, Oklahoma 73701

Patrick Martin, PO Box 14192, Portland, Oregon 97214

(6-28 June) (PIT)

Finally, some good Es has come to Western Oregon along with the warm weather. Afternoon (noon-4PM) on 27th of June was excellent. It was by far the best Es opening I have ever seen. I recently got a small (5-element) Winegard ch-3 yagi up, below my 10-element yagi. The FM antenna works well on channels 5-6 and FM, and the ch-3 antenna works well on channels 2-3-4.

	1330	KXON	5 Mitchell SD	1210
13 Es 1420 KAD	4 Boise ID??	T 400	1430 KXJB-4 Valley City ND??	T1200
16 tr 0122 CBUT	2 Vancouver BC (s/off)	300 <u>28</u> tr	1200 KIRO-7 Seattle WA	150
Es 1610 KPRY	4 Pierre SD??	T1100	1205 KSTW-11 Tacoma WA	140
ms 1825 unId	4 (F-Troop)		1210 KCTS-9 Seattle WA?	T 150
18 tr 0140 CHAN-8 Vancouver BC		300	Es 1215 unId 4 (To Tell Truth)	
26 Es 2015 KXJB-4 Valley City ND		1200	1240 unId 4 (Our Lives)	
27 Es 1305 KDLO-3 Watertown SD		1220	1640 unId 4 (Rodeo)	Good DX & 73's.

Steven Wisseblood, 707 Loma Way, Santa Maria, California 93454 (12 May - 8 Jul) (PDT)

Equipment: 1959 Packard Bell 19" B&W, 25-el A-A-525 @ 25°, 22-el UHF @ 30°

12 Es 1224 unId 2 "Villareal," SS/Mexico, XHCH?.. 2128 KXLF- 4 MT 875 20 Es 0905 KMID? 2 TX T1066  
1245 unId 2 CB Mex.? 2129 KFBB- 5 MT 990 21 Es 1147 KMID? 2 TX T1066  
1300 KMID- 2 TX 1066 2 Es 0944 KMID? 2 TX T1066 1330 "KXMB-12"2 ND N1355  
1800 KMID- 2 TX 1066 1258 CKCT- 2 KS 1205 1500 unId 2  
1806 XHCH- 2 Chih 948 1300 KTWO- 2 WY 935 25 Es 0754 unId 2 s.e.  
1822 KENS- 5 TX 1329 1306 KWGN 2 CO 905 0800 KMID- 2 TX 1066  
1824: MUF 97.3 1331 KDUH 4 NE 1040 0802 unIds 2-4  
1830 XHIT? 5 Chih T 948 1623 CKCK- 2 Sask 1335 0817: MUF 94.7  
13 Es 1847 unId 2 e.n.e. 1630 CKMT 4 Sask N1320 0830 KDBC 4 TX 926  
14 Es 1230 KTWO- 2 WY 935 1651 KXLF 4 MT 875 0834 unId 6  
1256 KTVQ 2 MT 975 1856 KOMO- 4 WA 879 26 Es 0807 KMID- 2 TX 1066  
1300 KBCI 2 ID 640 1858 KATU 2 OR 741 0813 unId 5  
1301 KXLF- 4 MT 875 1910 CBT 2 BC 1000 0900 KDIX- 2 ND 1234  
1338 KFBB- 5 MT T 990 1910: MUF 100.3 KTWO- 2 WY 935  
1358 K AID 4 ID 640 1930 KREM- 2 WA 899 1008 KOB - 4 NM 780  
1828 KXLY- 4 WA 899 10 Es 0646 unId 2 "Today" NBC 1012: MUF 92.3  
1830 KREM- 2 WA 899 0700 CKCT 2 KS 1205 1046 KOAI 2 AZ 495  
1834 KOMO- 4 WA 879 079 KFYR- 5 ND N1360 (strong, library pgm)  
1901 KLEW- 3 WA 815 0829 KTVQ 2 MT 975 1259 XHCH- 2 Chih 948  
1928 KTWO- 2 WY 935 0837 KDUH 4 NE 1040 2125 KTWO- 2 WY 935  
1957 KTVQ 2 MT 975 0945 KWGN 2 CO T 905 27 Es 0618 unIds 2-6  
2058 XHCH- 2 Chih 948 1104 KMID- 2 TX 1066 0630 KOAA 5 CO 910  
2059 KMID- 2 TX 1066 12 Es 0855 unId 2 1759 CKCT 2 KS 1205  
15 Es 1420 unId 2 0kHz-KNXT 1949 unIds 2-5 east 28 Es 1130 KTWO- 2 WY 935  
17 Es 1347 KTVQ? 2 MT T 975 1958 KREM- 2 WA 899 1142 KREM- 2 WA 899  
1348 CKCK? 2 Sask T1335 13 Es 0832 unId 2 east 1145 KXLY- 4 WA 899  
1430 KREM- 2 WA 899 0900 KMID- 2 TX 1066 1403 KWGN 2 CO 905  
1924 XHI A 2 Dur ("Canal-5", SS) 0904 K AMR 4 TX 1046 1417 KTIV 4 IA 1375  
20 Es 1324 KWGN 2 CO 905 0930 KTWO- 2 WY 935 1428: MUF 104.1  
1330: MUF ch 6 1004 ICR2 2 Cuba T 1450 KDIX- 2 ND 1234  
22 Es 1056 unId 2 s.e. 1028 unId 5 29 Es 1747 CKCT 2 KS 1205  
1059 KMOL 4 TX 1329 1206 KWGN 2 CO 905 Jul 1747: MUF ch 5  
1118 XHCH- 2 Chih 948 1555 K AID 4 ID 640 2 1703 unIds 2-4  
1135 XHIT- 4 Chih 948 1559 KBCI 2 ID 640 1902 XHI - 2 Son 846  
1608 KREM- 2 WA T 899 1614 unIds 4-5 1923: MUF 106.3  
1700 KTVQ 2 MT 975 1830 CKCT 2 KS 1205 2000 KMID- 2 TX 1066  
1830 KTWO- 2 WY 935 1959 KTVQ 2 MT 975 2037 CKCT 2 KS 1205  
1959 KNOP- 2 NE 1138 14 Es 1352 XHCH- 2 Chih 948 3 Es 0810 unIds 2-3  
2000 KUSD- 2 SD 1355 1402 "Noti-Impacto" 0814 KMID- 2 TX 1066  
2012 KTIV 4 IA T1380 1414 KENW 2 DF T1645 0825 KNME 5 NM T 780  
2012: MUF ch 5 ("24 Horas") 0830 K AMR 4 TX 1046  
23 Es 1036-1138 unIds 2-4 Mex 1428 KMID- 2 TX 1066 0838 KENW 3 NM 965  
1118 XEPM- 2 Chih 826 1558 KOCO- 5 OK 1281 0900 KREM- 2 WA 899  
1519 KTVQ 2 MT 975 1559 KTVY 4 OK 1281 1100 CHEC- 2 BC 1034  
27 Es 1236 KTVQ 2 MT 975 1600 KTEW 2 OK 1365 ("Okinagan TV")  
1300 KXLF- 4 MT 975 1602 CKCT 2 KS 1205 1330 KREM- 2 WA 899  
1340 KDIX- 2 ND 1234 1614 heavy offset on 6 1452: MUF 97.7  
28 Es 1415 KWGN- 2 CO 905 1630: MUF 101.9 1720 KDIX- 2 ND 1234  
29 Es 0843 unId 2 Mex, SS (Es) 1637 KTUL 8 OK T1365 KTWO- 2 WY 935  
30 Es 1321 KMID- 2 TX 1066 1644 KSWO 7 OK T1240 6 Es 1730 unId 5 CBS  
31 Es 0830-1030 KMID-2 TX1066 KWTW 9 OK T1281 1835: MUF 107.5  
0929 KDBC 4 TX 829 1840: MUF 97.9 7 Es 0730 KMID- 2 TX 1066  
1010 unId s.e.Mex? 2030 unId 2 (J.Carson) 1030 KDIX- 2 ND 1234  
1607 XHI - 2 Cd.Obregon 15 Es 0928 XHI - 2 Son 846 (end "Dialing for Dollars")  
(bull's eyeTP, Id) 0930 KVOA- 2 AZ 575 1107 KNOP- 2 NE 1138  
Jun 1 Es 1244 unId 2 e.n.e. 1026 XHCH- 2 Chih 948 1600 unId 2  
2 Es 1203 XHQ?- 3 (SS) 1756 KTVQ 2 MT 975 8 Es 0728 CKCT 2 KS 1205  
7 Es 1754: MUF ch 6 2023 KREM? 2 WA T 899 0800 KNOP- 2 NE 1138  
1829 KDUH 4 NE 1040 16 Es 0854 unIds 2-4 0807 KTVQ 2 MT 975  
1847: MUF 97.9 0900 KTWO- 2 WY 935 0930 KXLF- 4 MT 875  
1900 KYCU 5 WY 947 1004 OFAC? 2 Alta 1160 0936 KDIX- 2 ND 1234  
2000 KTWO- 2 WY 935 1130 CKCK- 2 Sask 1335 0936 "KXMB-12"2 ND 1355  
2103 KTVQ 2 MT 974 17 Es 1205 KMID? 2 TX T1066 (new xltr. location?)  
Well, that's all for this month, a rather hectic period for Sporadic E, with it frequently reaching into FM. 1976 is the best year for Es since 1975! MUF skyrocketed to Channel 9 to OK City on 6/14. If Glenn Hauser had still been in Oklahoma, he might have seen KHJ-9 Los Angeles! 73.

Bob Cooper, Jr. Route 5 Box 782, Guthrie, Oklahoma 73044 (5 Jun - 4 Jul) (CDT)

There were a couple of extremely long, stable Es openings here during June; surpassing any "normal year" in length and stability of opening. June 12 Es opened to California around 2100 and at 2200 on 13th the band was just starting to close—more than a full day of virtually non-stop Es west with other directions in and out during that time. On June 26 it opened east/NE at 1025, staying open non-stop or almost so from here into PA, MD, NY, etc. until after 2300 on 28th (more than 60 hours long). In spite of these two openings, and others of less stature, June was not good for high MUF's and the month was a disappointment here.

Jun 5 Es t/in 1315 thru 1900+, ch 2-3 in and out during period.  
Jun 6 Es t/in 0950 ch 2 in/out; t/in 1735 chs 2-6 (MUF 104 MHz), 1800 WEDU 3 WPTV 5 FL, 1900 KCBJ-17 MO (logging #656, 500-mi. ch-6 Es).

Jun 7 Es t/in 1735 thru ch 4, WBTV 3 NC, 1817 MUF 107.9 to PA, 1901 WBEN-4 NY WHEN-5 NY (#657), 1930 CKVR CBLT 5. WHEN-5 NY in thru 2130—MUF kept tickling above 108 but never got much further. 2130 WWK-3 NC. MUF fell rapidly between 2130 and 2200 here from 105+ to below 70 MHz.

Jun 8 Es t/in to SW (Spanish) ch 2-3. 2050 KCRA-3 KRON-4 KVIE 6 CA;  
 tr 2140 KDNL-30 MO.

Jun 9 tr t/in 0725 KCBJ-17 MO KIDZ-24 TX.

Jun 10 Es t/in 1832 west chs 2-3 to past 2045.

Jun 11 tr t/in 0845 KEDT 16 KIDZ-24 KVUE 24 KDOG-26 KTVV 36 KNCT 46 all TX,  
 t/in 1750 KCBJ-17 KDNL-30 MO; Es t/in 2110 chs 2-4 west; and tr WICS 20 IL KHIN 36 IA  
 KTVV 36 TX KRIN 32 IA WMCA-31 WI WMTV 15 WI, 2200 WICS 20 WEEK-25 WMHD-31 IL,  
 t/in 2325 WSJV-28 IN.

Jun 12 tr t/in 0750 WSJV-28 IN WICS 20 IL WNDU 16 IN WLFI-18 IN WICD 15 IL. Sigs faded by 0825. Es t/in 0923, 0928 KDIX-2 ND CKCO-2 Ont, 1053 WPBT 2 FL.

Jun 13 Es t/in 1000 weak ch 2-3, 1300 KOAI 2 AZ, 1430 KORK-3 NV, 1616 KUTV 2 UT,  
 1700 KOAI 2 AZ, 2130 KHT 3 CA.

Jun 14 Es t/in 1830 ch 2, 1900 KCRA-3 CA, 1915 MUF 107.9 So. Cal, XETV 6 BCN,  
 1920 KSEY-6 CA (#658), 1955 KVUU 5 NV, 2000 KEYT 3 CA, 2030 XHBC-3 BCN.

Jun 15 Es t/in 1830 ch 2-3, in-out to 1955. 2000 KTWO-2 WI KTVQ MT, MUF 100 MHz

NW, 2025 KDSJ-5 SD (#659), MUF 108+ MHz, 2100 KTVN 6 MT, Es past 2200 NW.

Jun 16 tr t/in 0614 WEBJ-7 TN, 0623 WICS 20 IL, 0648 KDNL-30 MO KLAA-14 LA, 0658 KCBJ-17 MO WMAR 18 MS, 0721 KHIN 36 IA KVUE 24 KIDZ 24 KTVV 36 TX WMAD 23 MS and a mess more NE, E/NE, SE and south. Nothing beyond 600 miles.

Jun 17 Es t/in 1935 WPBT 2 WEDU 3 WTJ 4 FL, MUF 94 MHz, t/in 2140 MUF ch 3.

Jun 18 Es t/in 2110 ch 2, probable WMAR-2 MD.

Jun 19 Es t/in 0840 WPBT 2, t/in 0940 WEDU 3 FL, t/in 2020 ch 2-3 n.e., 2030 WMAR-2 MD, t/in 2230 WBTV 3 NC. Still open 0000.

Jun 20 Es t/in 1715 ch 2-3, 1730 WPBT 2 WESH-2 WEDU 3 FL, Es in-out thru 2145;  
 tr 2200 KEDT 16 KIDZ 24 KVUE 24 KDOG 26 KTVV 36 KNCT 46 all TX.

Jun 21 Es t/in 2045 weak ch 2 s.e., Caribbean.

Jun 22 Es 2123 KTVN 2 NV.

Jun 23 tr t/in 0745 K68AU K66AJ Sayre OK (#660,661) K66AB K64AC K68AD Perryton TX;

Es t/in 2100 weak ch 2 n.e.; tr t/in 2110 KDNL-30 KCBJ-17 MO WPT 16 MS.  
Jun 24 tr 0650 KOLN-10 KUON 12 KYNE-26 KHNE-29 NE KVDF-21 IA, 0705 KCBJ-17 MO WPT 16 MS KDOG-26 TX WMHD-31 WICS 20 WEEK-25 IL; Es 0720 weak ch 2; tr t/in 0755 KMEG 14 IA  
 KXNE-19 NE; Es 1025 WFMY-2 NC, t/in 1420 Es still open, MUF ch 6, t/in 1755 Es still open MUF ch 3, t/in 1846 WMAR-2 MD, t/in 1955 WTAR-3 VA, t/in 2050 KCBJ-3, t/in 2300 KCRA-3 CA Ch 2-3 Es still going 0100 on 27th.

Jun 25 tr t/in 0845 KCBJ-17 MO, plus weak Es ch 2-3 n.e., 1030 WISC-3 WI, 1033 French ch 2 probable Montreal, 1100 WTAR-3 VA KORK-3 NV (note, these two simultaneously—possibly of 2E), 1125 WMAR-3 NC, t/in 1155 CKVR-3 Ont, 1158 signs of French ch 2 again, CKCO-2 Ont, 1220 WFMY-2 NC, 1400 CKVR-3 Ont again, t/in 1800 WFMY-2 again;  
 tr t/in 2143 KCBJ-17 MO, plus Es ch 2-3 continues.

Jun 26 Es 0535 weak ch 2 n.e.; tr 0543 WOI-5 IA; Es 0603 CKGN-2 Ont with a second Canadian ("Canada AM") behind it; tr 0725 KCBJ-17 MO; Es t/in 1800 KYW-3 PA, t/in 2140 strong Es ch 2-3 n.e., 2200 WSYR-3 NY, MUF now ch 6, 2210 WFSB-3 CT, 2220 MUF 99-100 MHz, 2300 MUF 107.5 MHz, Es still 2-3 by 2330, n.e. and n.w.

Jun 27 Es t/in 0721 n.e., probable WMAR-2 MD, 0730 WCBD-2 SC WTAR-3 VA.

Jul 1 Es 0735-0751 n.e. ch 2, probable WFMY-2 NC.

Jul 2 Es t/in 1930 w.n.w. ch 2-3, 1940 KTVQ 2 MT, 2100 CFAC-2 Alta, out apx 2145.

Jul 3 Es t/in 1015 probable WPBS 2 FL, 1100 probable XEW-2 DF, 1250 probable

WEDU 3 FL, 1430 Es ch 2 north. 73.

Jim Pizzi, 300 Park, Orcutt, California 93454  
 7 Es 2022 KPRY 4 PierreSD44413 0850 KMID-2 TX (Es) (7 Jun - 2 Jul) (PDT)  
 2029 KREM-2 WA(til2245) 0851 KWAB 4 TX 0300 XETV 6 BCBN 4055  
 2058 KTVQ 2 MT 0902 KACB 3 TX Es 1201 unId 2 east  
 2110 KXLY-4 WA(CBS) T 0905 KPRC-2 TX 1259 KCKT 2 KS  
 2112 KRTV 3 MT(Φ-KEYT)T 0929 KOT A-3 SD 1359 XHCH-2 Chih  
 2302 KWGN 2 CO(s/off) 0951 XEPM-2 18 ms 1847 unIds 2,4  
 2318 KOA-4 CO 0956 KDBC 4 TX tr 2059 K59AC(KTEH54)2045  
 KTVS 3 CO 1008 KENS-5 TX T 2104 K83BJ(KQED9) 1045  
 2321 KSL-2 UT 1016 KMOL 4 TX 2300 KFMB-8 SDC A 4454  
 2338 KOAA 5 CO(3 deep) 1025 KWAB 5 TX KGTV-10SDCA 3454  
 8 Es 0002 KDUH 4 NE 1205 KWGN 2 CO 19 ms 1510 KTVQ 2 MT (972mi)  
 0004 KUTV 2 UT 1207 KTVS 3 CO T Es 1929 unId 2 east  
 0007 KSL-5 UT 1209 KLINE 3 NE(tp;pgm1230) 2018 KPDFX-3 TX T  
 0014 KYCU 5 WY(s/off) 1211 KSNB 4 NE 2029 KMID-2 TX  
 0040 KTWO-2 WY(s/off) 1229 KOA-4 CO KWAB 4 TX  
 0107 unId 2 north (Max.MUF today 99.9) 2033 KACB 3 TX T  
 1833 KCKT 2 KS(Id1900) 1600 KBCI 2 ID 2103 XEPM 2  
 1836 KARD-3 KS T KRTV 3 MT tr 2322 K83BJ GonzalesCA  
 2100 KMID-2 TX T 1603 KXLF-4 MT 2324 KGO-7 SF.CA 0434  
 2109 XHCH-2 T 1605 KFBB-5 MT 2343 K97ID AtascaderoCA  
 2302 KTVQ 2 MT 1832 KCKT 2 KS 20 tr 0106 KOVR13 St.CA 2135  
 9 Es 1115 unId 2 east 1836 KARD-3 KS ms 0110 KUTV 2 UT(&unId5)  
 1130 KDBC 4 TX 1840 KSNB 4 NE T Es 0858 KOA-4 CA  
 1151 KWAB 4 TX 2305 KNOP-2 NE 0859 KWGN 2 CO  
 1226 KXTAT 5 NE T 14 Es 0016 2100 8,10 SDiegoCA  
 1233 KAMR 4 TX -0022 KAU 2 OR 2105 KQED 9 DFranCA  
 1259 KTWO-2 WY 1515 KMID-2 TX 2301 KCST39 SDiegoCA  
 1305 KWGN 2 CO 1516 XEPM-2 T 21 Es 1115 unId 2 east-weak  
 1330 KDIX-2 ND T 1529 KTEW 2 OK 1407 unId 2 east  
 ms 1337 KREM-2 WA T 1545 KTVY 4 OK 2E? 1428 WLBT3 G? T  
 Es 1623 CKCK-4Sas(Id1659) 1548 KOCO-5 OK 2Es 1429 WRZ 2 LA 1740mi  
 CKCK-4Sas(Id1700) 1549 KAMR 4 TX 2E? 1440 WM-BorWDIQR?etc.  
 CKOS-3 T 1553 KOTV 6 OK N 2Es 1458 WSB -2 GA 2040mi  
 1635 KJFB-5 1554 KARD-3 KS T 2E? 1502 WESHorWCBD?2  
 1651 KRTV 3 MT KWAB 5 TX Es 1633 KTVQ 2 MT  
 1653 KXLF 4 MT 1724 KTVG 6 KS N 1849 KCKT 2 KS(Id1900)  
 1720 KYUS 3 T 1821 KAIZ 6 TX 1900 KARD-3 KS(Φ-KEYT)  
 1725 KPRY 4 SD T 1856 KLBK 6 T 22 Es 1410 KTWO-2 WY(Id1430)  
 (Max.MUF today 96.3) 1927 KENS-5 TX 1423 unId 3,4 n.e.  
 ms 1739 unId 2 n.e. ABC (MUF today 107.5; concentrated FM, monitoredTV6&7) 1423 CKCK-2 Sask  
 1747 CFAC-2 Alta 15 Es 0937+ unIds 2 1429 KDIX-2 ND  
 1800 KPRY 4 SD 0959 KMID-2 TX 1545 KTVQ 2 MT(Id1559)  
 1902 KING-5 WA 1024 XHCH-2 Chih 1545 unId 5 n.e.  
 1907 KOMO-4 WA 1658 KTVQ 2 MT 25 Es 0750 KMID-2 TX(Id0800)  
 1929 KREM-2 WA 1724 CKCK-2 Sask 0810 KDBC 4 TX(Id0830)  
 1932 KXLY-4 WA 1757 CFAC-2 Alta 0820 unId 5 east  
 2033 KRTV 3 MT 1801 unId 4 nme 0904 unId 4 (KWAB?)  
 (I'm sure Es induced 1806 CJOC-3 mneCFCN14 T 26 Es 0710 KMID-2 TX(Id0730)  
 heavy MS all day) 1828 CFOML-2 Oyen Alta N 0756 KENS-5 TX T  
 10 Es 0906 KMID-2 TX(Id0930) 1.2kW,.6kW,1433N1260 KMOL 4 TX  
 0930 KMOL 4 TX 2029 KAU 2 OR 0930 KOT A-3 SD  
 0956 KWAB 5 T 2031 KLEW-3 ID(WA) 0940 unId 6 east  
 1029 KTVQ 2 MT 1933 unId 2 Canada? (MUF 89.9 brief@0936)  
 1159 KENW 3 NM 16 Es 1127 CKCK-2 Sask 0959 KUTV 2 UT  
 1202 XEPM-2 T 1129 KTVQ 2 MT(u/CKCK) 1001 KOB -4 NM(Spanish) pgm  
 1932 unId 2 n.e. 1224 KDUH-4 NE T 1030 KAMR 4 TX  
 11 tr 1128 KTVU 2 Oak.(Ai700) 1633 unId 2 Canada? 1054 unId 5 (KNME?)  
 1700+ 2,4,7,9,20,38,44, 1933 unId 2 Canada? 1056 KENW 3 NM(t/off)  
 60 all SanFranCA 17 Es 0001 KREM-2 WA(ads0027) 1057 KOAI 2 AZ  
 (all fair-good all day) 0002 CKCK-2 Sask 1105 KDIX-2 ND  
 12 tr 0131+ 3,13,40 SactoCA 0003-38 2-4 unIds,Can. 1123 KBCL 2 ID  
 0233 KGSC 36 SJose CA 0109 KAU 2 OR 1230 XHCH-2 Chih  
 Es 1805 KAMR 4 TX (Es still in C126) 0126 KGTVO 10 SD.Ca5554 1255 XHITorXHBS?4s.s.e.  
 1930 KREM-2 WA 0127 KNTV11 SJ.Ca5555 1920 unIds 2,4 Span,Mex  
 (MuchMS13-1600Jun10,11,12,13)

August 1976

26(Es) 2028 KNOP-2 NE	1224 KXLY-4 WA	1732 KOB -4 NM	T
2035 unId 4 n.e.	1229 KBCI 2 ID	1733 KNMEorKXT?5	T
2040 KDIX-2 ND T	1243 KLEW-3 ID(WA)	(MUF ch 6)	
2046 KTVQ 2 MT	1245 KCKT 2 KS(Idi300)	1745 KMID-2 TX	T
2106 KTWO-2 WY	1324 CBUT 2 BC	K AMR 4 TX	T
2318 unIds 2,4 e.n.e.	1330 KATU 2 OR	1756 KOAA 5 CO	
27 Es 0007 KDIX-2 ND(s/off)	1408 KTV 4 IA	1818 KWAB 4 TX	T
0840 unId 2 east	1429 KUSD-2 SD	1823 KENW 3 NM	T
1131 KMID-2 TX	KDUH 4 NE	Jul 2 Es 1639 XEPM-2	T
1833 KCKT 2 KS	(MUF 96.5 @1432)	1640+ unIds 2-4	
K RD-3 KS	1440 KXON 5 SD	1721 KMID-2 TX	
unId 4 east	KDIX-2 ND	1723 KOCC-5 OK	
1903 unId 3(Esfade1925)	1505 KTVQ 2 MT	1726 KTVY 4 OK	
Es 2100 unId 2 n.e.weak	1515 unId 2 n.e.	KWAB 4 TX	T
2131 KUSD-2 SD(s/off)	1529 KTWO-2 WY	1817 KXT 5 TX	T
28 Es 1026 unIds 2 e.n.e.	1535 Es fade out	1831 KAIZ 6 TX	T
1107 KTWO-2 WY	1630 KDIX-2 ND	(MUF 107.3 @ 1852)	
1130 KOT 4-3 SD	KTWO-2 WY	1854 KAMR 4 TX	
1157 KDUH 4 NE	1632 KTVQ 2 MT	1912 KTVC 6 NE	T
1200 KREM-2 WA T	1657 CKCK-2 Sask	1929 KOCC-5 OK	
(MUF 93.9 brief@1209)	1910 unId 2 n.e.	2000 KACB 3 TX	
1216 KYUS 3 MT	T 29 Es 1730 unId 3 n.e.	2011 KCKT 2 KS	

June 21 started off as uneventful day. I was getting over a summer cold and just hanging around the house hoping for some DX. I left one of my sets on w/ch-2 yagi pointed east, but just tropo scatter from KNKT 2. Some weak Es in morning, probably KMID-2 (I wonder now!). At 1407 I noticed Es on ch 2—"Flintstones" in strong for about 5 minutes —no breaks. Then at 1420, "Dinah Shore" for 5 min. strong. Then it happened—a double-hop opening—mention of Baton Rouge and ads w/Denham Springs, Id, then into Sanford & Son (by now I'd forgotten about the cold!). At 1435 some 100hz CCI to KNKT. At 1440 a probable PBS w/Sesame St (buried KNKT—no offset noticed). At 1455 "Sesame" faded out. At 1458 end of FBI, 1459 w/audio only heard Atlanta mentioned and at 1500 saw "Action News." At 1502, two news stories, one about a beach-front, the other a live-action w/lots of police on the scene (no audio). "Action News" may not be WSB-2 but a coastal station. All in all, a good DX day—it should happen to everyone!

June-26 DX was good with 8 hours of Es. I got excited at 1105 PDT when ch-2 had ads for Fargo & ND Demo Convention—thought I had a WD AM-6 translator. I called WD AM, and they said programming was them but no ch-2 xtrs. Then I called KDIX-2; it was them. They said WD AM had bought a 3-hour block of time for Convention so KDIX let WD AM ad and Id's go out on ch 2. 7 new loggings bring the total to 172.

(1-30 June) (CST)			
4 Es1645-1718 unId 4 Mexico (Ø offset)	1919-1959 WCSC-5 SC N1030 14 tr0455-0515 stns.in Dallas		
1645-1800 XEW -2 DF 1175	1927-2005 WCIV 4 SC 1030 /FtWorth/Wichitafalls area		
1653-1654 unId 6 Mexico (Ø offset)	1929-2034 WCBD 2 SC 1030 Es2000 KUTV 2 UT 840		
1714-1718 XEZ -3 Qro1100	1958-2000 WBTV 3 NC 940 17 tr0500 KETV 7 NE 345		
1800-1805 WTHS-2 FL 1250	2027-2029 WW AM-3 NC 1110 18 Es1700 WESH-2 FL 1075		
5 Es1453-1610 XEW -2 DF 1175	1822-1850 XEW -2 DF 1175 1730 WCBD-2 SC 1030		
1730-1800 XEW -2 DF 1175	1822-1904 XEZ -3 Qro1100 20 Es1100 unIds 2&3 Mexico		
6 Es1030-1100 KBCI-2 ID 1100	1824-1826 XEFE-3 Tam 620 21 Es2127 KRTV 3 MT 1040		
1549-1600 WPBT 2 FL 1250	1957-2000 XEW -2 DF 1175 26 Es1915-1930 WT AM-3 VA 1170		
1600-1630 WEDU 3 FL 1050	2022-2025 XEZ -3 Qro1100 2000 WBTV 3 NC 940		
1630: MUF 92 MHz	1801-1832 KBCI-2 ID 1100 27 Es1127 WBTV 3 NC 940		
1700-1801 WRBL-3 GA 760	1830-1854 KREM-2 WA 2059 CKCK-2 Sas1020		
1704-1705 WE AM-3 FL 720	1950-1953 XEW -2 DF 1175 1200 WCIV 4 SC 1030		
7 Es1640 unId 2 easternUS	2101-2156 XEW -2 DF 1100 1357 WPSX-3 PA 1070		
1652-1700 unId 4 easternUS	2020-2021 KOMU-8 MO 335 1500 KGFE-2 ND 805		
1716 KYW -3 PA N	2021-2022 KCBJ-17 MO 335 CBWFT 3 Man 930		
1716-1731 unId 6 easternUS	2022-2023 KEM A-41 MO 250 2100-2115 KYW -3 PA		
1716: MUF 108+ MHz	2059-2107 KHIN-361A N 2100 MUF Channel 4		
1731-1733 unId 5 easternUS	13 Es1159-1201 KO AM 2 AZ 810 28 Es1958-2007 CKPR-2 Ont 920		
1739-1740 unId 4 easternUS	1357-1429 un.2Mex"Televisa" 2020-2043 CKGN-2 Ont1170		
1759-1900 WKYC-3 OH 930	1428-1430 KTVK 3 AZ 855 2025-2043 CBFT 2 PQ N		
1800-1801 unId 5 easternUS	1430-1500 KBCI 2 ID 1100 2125-2129 CKCO-2 Ont1020		
1823-1900 WBEN-4 NY 1080	1447-1705 KUTV 2 UT 840 2129-2132 WPSS-3 PA 1070		
1823-1900 WEMS-5 OH N	1500-1658 KCPX-4 UT 840		
1846: MUF 108+ MHz	1700-1750 KO AM 2 AZ 810		

Not as much free time for TV DX during June. Added 5 new stations to my log, bringing total (since 1973) to 299 stations logged.

Doug Everett 1708 W. Maine Ave. Enid OK 73701 (22 May-01 July) (CDT)  
 Equipment: Sony KV-1203 color; CDE AR-33, AR-40 rotators.  
 Antennas: Winegard K-10-26 yagi @30'; K-10-713 yagi @40'; Finco F-7 UHF  
 dish @35'w/preamp. Underlined are new. Log now at 235 stations.

22 Es 2029 KTVU 2 CA 1340	Jn 06 Es 1830 KUTV 2 UT 810
2044 KURA 3 CA 1300	1900 WBBM 2 IL 670
25 Es 1130 WRBL 3 GA 800	07 Es 1026 UnID 2 'Canada AM'
26 Es 1308 thru 1325; UnIDs ABC-2; CBS-3 & 5; slide and mx on 4; East.	1330 WJBK 2 MI 880 1400 WBBM 2 IL 670 1429 WBAY 2 WI 750 1430 CJIC 2 ON 980 1600 WCSC 5 SC 1070 1800 KTVQ 2 MT 850 1900 CKGN 6 ON 1320 Ottawa area ads.
27 tr 2357 KTXS 12 TX 310	1929 WEWS 5 OH 940
28 tr 0750 KMCC 28 TX 280	2000 WKYC 3 OH 940
0854 K70EK KS 70	11 tr 1715 KTVJ 16 MO 220
0856 KBMA 41 MO 260	1735 KOZK 21 MO 270
0924 KHNE 29 NE 290	1736 KMTC 27 MO 270
Snowfree for hours.	These three way up.
0943 KGIN 11 NE 310	Es 1953 XEFE 2 Tams.
2206 KTSB 27 KS 220	tr 2057 KCBJ 17 MO 360
Way up from norm.	2108 KCPT 19 MO 260
2349 KXTX 39 TX 250	2133 KODE 12 MO 220
With 10kHz CCI.	2134 KOLR 10 MO 270
2355 KTVT 11 TX 250	2143 KDNL 30 MO 450
29 tr 0014 KBMA 41 MO 260	2232 KYTV 3 MO 270 2245 UnID 19 East; GCC with KCPT.
Carrying CBS movie.	2247 WAAY?31 AL 660 T
0042 KDOG 26 TX 480	2329 KMTC 27 MO 270
Movie: The Gambler.	Like local all night.
0100 KHTV 39 TX 480	12 tr 0918 KMCC 28 TX 280
0102 KTRK 13 TX 480	*In Fort Collins, Colorado*
This @ 5555 on CATV.	14 Es 0958 KIII 3 TX
0117 KHOU 11 TX 480	1715 UnID 3 Mexico
0141 WRBT?33 LA 570 T	1745 KTVK 3 AZ
Old comedy movie.	*Back in Enid, Oklahoma*
0146 KTHV 11 AR 350	18 Es 1855 WSAV 3 GA 1020
0200 tr on way out, no	19 tr 0729 KXTX 39 TX 250
tr seen by dawn.	0827 KTHV 11 AR 350
Jn 02 tr 0838 KFPW 40 AR 220	0834 KBMA 41 MO 260
0856 K71BJ, K73BJ, and	0836 K70EK KS 70
K75BM OK 70mi.	21 Es 1400 WWAY 3 NC 1150
0858 K77BJ, K79AZ, and	1410 WUND? 2 NC 1190 T
K81AN OK 40mi.	Color bars; low tone
Es 1203 WTHS 12 FL 1290	1430 WSB 2 GA 790
03 MS 1836 UnID 3 East;	1457 WCBD 2 SC 1070
Adam-12; 20-sec.	1650 WSAV 3 GA 1020
04 tr 0837 KHIN 36 IA 340	tr 2114 WRBT 33 LA 570
0839 KBMA 41 MO 260	ABC Sports; strong.
Es 1118 WFBC 4 SC 890	2115 UnID 27 SE; just
1121 WECT? 6 NC 1140 T	barely detectable.
1124 WFMY? 2 NC 1030 T	2120 Strong GCC on
1128 WBTV 3 NC 970	KWTV-9 Okla. City; SE.
1212 WCYB? 5 VA 890 T	2229 KFPW 40 AR 220
1226 WCSC? 5 SC 1070 T	
1230 WTVR 6 VA 1140	
1246 WLWT? 5 OH 760 T	
1337 WTTG 5 DC 1160	
05 Es 1556 XEW 2 DF 1140	
06 Es 1100 KBCI 2 ID 1080	
1820 WEAR 3 FL 750	

Jn 21 tr 2246 KSLA?12 LA 370 T	0730 WHO 13 IA 430
2300 tr on way out, no	0744 KCPT 19 MO 260
tr seen by dawn.	0829 KERA 13 TX 250
25 tr 2130 KMTC 27 MO 270	0935 KHIN 36 IA 340
Way up from norm.	Es 2000 WTAR 3 VA 1140
26 tr 0702 KCBJ 17 MO 360	Jn 27 tr 0752 KUAM 7 KS 190
0710 KVFD 21 IA 470	0754 KODE 12 MO 220
0721 WEEK 25 IL 530	0755 KTVJ 16 MO 220
0727 WMBD 31 IL 530	0756 KMTC 27 MO 270
No sign of WRAU-19.	0757 KTSB 27 KS 220
0729 KBMA 41 MO 260	These stations way up.

Well, we've had some nice tropo since my last report. It sure would be nice to raise the dish, but recently some of the neighbors have expressed objections to my idea for a tower. Some people just don't appreciate true beauty, hi.

Does KBMA-41 regularly carry the CBS Late Movie? They're not consistent enough for me to check. All I know is they carried it on 28 May night. Why doesn't KCMO-5 carry it? (Some stations out here do that. A primary affiliate doesn't want to carry a network movie, so an independent carries it regularly, instead. dps)

The opening to Houston on 28-29 May was very strong, particularly on chs 11 & 39. I had mistaken KHTV for KXTX at 0400 and moved on, so the 0100 ID really caught me by surprise. If I'd thought to check the CATV, I'd have known better, as KXTX is carried on ch 8. Later, I did check the cable, and promptly found KTRK @ 5555. At 0102 on my system, I had recorded it at 3455. I wonder what many cable subscribers thought at seeing ABC programming on ch 13 late at night, as 13 is educational locally, and doesn't stay on all that late. Houston FM's were also in very well. The duct didn't, however, seem to have much effect on low band.

The Es openings of 4, 5, and 6 June were particularly intense. Several times the entire low band would become totally useless, crammed with QRM. The MUF stayed above 107.9 MHz for long periods, but never reached ch 7 at this QTH. I don't know exactly how high it did get, as I don't have a PSB monitor any longer.

Well, I'm waiting (impatiently, of course) for the late summer ducting. By the time this is in print, perhaps I'll have logged some. Hope so. I hope everybody has had a nice summer. Best of DX!

Fred McCormack, Des Lacs, North Dakota 58733	(6-30 June) (CDT)
[Fargo DX, indoor antennas:]	1729 WCBF-4 MS 33331220
6 Es 1533 unId 2 2235 15 Es 1225 KFDX-3 TX 33351000	1730 WKRC-5 AL 23331400
1838 KPRC-2 TX 33321200 1228 KTEW 2 OR 3333 875	1825: MUF 103.3 BajaCal
1910: MUF 94.9 MHz tr 1329 KPRC-4 SD 3425N275	1857 KOAT 2 AZ 33331030
1929 WBRZ-2 LA 33321185 [Fargo DX:]	1859 WGR -2 NY 44321155
1950 KRGV-5 TX 3335N430 18 Es 2206 CKGN2-2 On2332 915	1959 WRC -4 DC 33341380
7 Es 1535 unId 2 ed.3335 2359 WKTW 2 NY 3432N95	2134 KALB-5 LA 44321255
1822: MUF 94.5 MHz WSYR-3 NY 3032N45	2150: MUF 105.7 to NC
1830 KENW-3 NM 3332 940 19 Es 0029: MUF 92.3 to NYC City	2204 KETX-3 TX 33331240
1840: MUF 99.1 to NM 0033 WGR -2 NY 2332N935	2220 WWAY-3 NC 33321550
1900 WSAY-3 GA 4032N320 0050: MUF 92.5 Montreal	2244: MUF 99.3 to TN
WAGA-5 GA 3335 1115 21 Es 1829 WKTW 2 NY 24321095	2259 WSJK-2 TN 44321230
1934: MUF 104.5 to TN 2158 WCAK-3 VT 3332N165	2259 WKY -4 OR 0322 900
9 Es 1855 KBCI 2 ID 0332 960 25 Es 1030 KFDX-3 TX 3035N900	2300 WTWO 2 IN 4032 925
1915: MUF 92.3 to ID 26 Es 1556 unId 2	WATE-3 (IN) 03321035
tr 2200 CKND-9 Man2345N215 1930 WEAR-3 (AL)3325N225	MUF 107+ to TN, IL, MO,
2302 WDIO-10 MN 3145 220 2029 KENS-5 TX 3332N220	KS—short skip—
10 tr 0627 KBJR-6 MN 3045N220 2045: MUF 100.3 San Antonio	720 mi. on 94.1
0632 KMSP-9 MN 3245 215 27 Es 0959 KDKA-2 PA 2322N945 29 Es 0045 WCBF-4 MS 44321220	
11 Es 2358 unId 2, 3 1028 WBTV 3 NC 0332N140	0051 KTVO 3(MO)3032 690
12 Es 1330 unId 3 1029 WRCB-3 TN 4042N005	0100 KARK-4 AR 30321040
[DX in Des Lacs:] 1120 WSB -2 GA 33331115	0101 KMOX-4 MO 3343 865
13 Es 1457: MUF 107.9 SFranarea 1128 WNHE 2 TN 3032N905	0108 WMC -5 TN 23341075
1558: MUF 104.5 Nevada 1159 WMAB 2 MS 23321015	0115 WREC-3 TN 44351075
1642: MUF 96.5 Idaho 1230 WRBL-3 GA 2333N190	0121 KTVI 2 MO 4432 865
1828 KENW-3 NM 0342 975 1241 WDIQ 2 AL 3332N195	MUF 102.7 to Memphis
1928 KMID-2 TX 33341115 1430: MUF 102.1	area until 0200
2116 KVUU 5 NV 33351085 28 Es 0001 WTVY 4 AL 3332N1240	0252 3/4 CB on chs 2, 3, 5
2120: MUF 101.9 Las Vegas Es 1130 KDKA-2 PA 3032 945	assume Canada
2130 KORK-3 NV 44331075 (MobileDXon194nrEmbdenND)	1130 CPG-2 BC 3333 975
2133: MUF 102.7L. A. area [Des Lacs DX:] 1158(BCTV)3 BC 2235	1158(BCTV)3 BC 2235
2205 KETX-3 TX 33341240 28 Es 1558 KMID-2 TX 4435 1115	1200 CBUT 2 BC 4432 995
2209 KJAC-4 TX 44331325 1620 KENW 3 NM 4445 975	1230 CHBC-2 BC 4034N820

Late night FM skip on 6-29 was the latest non-west coast FM skip ever DX'ed. Skip has been rather erratic this year with nothing really excellent except brief periods. 73.

Pat Dyer, 5315 Silvertip Drive, San Antonio, Texas 78228 (6 Jun - 7 Jul) (CST)

Equipment: 1976 model 9-inch black-and-white solid-state Penncrest; Archer V-100 and 8-bay bow-tie UHF array at 20 feet with rotor

[This starts with end of Pat's last report.] (New underlined; new mode)

(6)(Es) 1550 WECT 6 NC 1250 2 ms 0355:55 WSB-2 GA 880 1721 KTVO 3 MO 835  
 1659 WCML 6 MI N1355 0401:45 WLW-D 2 OH 1075 1728 KGLO- 3 IA 985  
 1716: MUF 98.9 0415 WLW-T 5 OH T1035 1729 KID - 3 ID 1215  
 1759 KGFE 2 ND 1240 0447:50 WKRG-5 AL 630 1731 WCCO- 4 MN T1110  
 1959 KGFE 2 ND 1240 Es 1010 WPBT 2 FL T1150 1739 KTC A- 2 MN 1110  
 KUSD- 2 SD 920 1040 WTVJ 4 FL T1150 1750 KSTP- 5 MN T1110  
 2105 KNOP- 2 NE 815 1055 f/out 1830 KDIX- 2 ND 1225  
 2135 KTC A- 2 MN 1110 1145 KNXT 2 CA T1190 1855 KUTV 2 UT 1080  
 2145 apx f/out KEYT 3 CA T1270 1859 KCPI- 4 UT T1080  
 1 ms 0434:40 WKRG-5 AL(tp)630 1430 unId 2 south 1908 KWGN 2 CO 810  
 tr 0455 KPLC- 7 LA 325 1520 3 Cuba 1940 KOA- 4 CO T 810  
 Es 0959 WESH- 2 FL 1055 1559 WPBT 2 FL 1150 1945 KRA A- 6 CO T 810  
 1055 WJXT 4 FL T1015 1605 WTVJ 4 FL T1150 1956 unId 2 Spanish  
 1110 KGLO- 3 IA 985 1615 f/out 2025 KVUU 5 NV T1040  
 1120 unId 6 ms 1728:35 WTWO 2 IN 935 2028: MUF 95.5  
 1125 WCCO- 4 MN T1110 Es 1810 unId 2 s.w. 2030 XHBS- 4 Sin T 700  
 1129 KD AL- 3 MN 1250 1830 unIds 2 n.w. 2045 KORK- 3 NV 1050  
 1159 WCBD 2 SC 1120 1915 KNBC 4 CA T1190 2058 KOA I 2 AZ 855  
 1229 WSJK- 2 TN 1010 1928 KNXT 2 CA 1190 2150 f/out  
 CKPR- 2 Ont 1400 1930 KEYT 3 CA 1270 12 tr 0120 KXAS- 5 TX 240  
 WB AL- 2 WI T1190 2035 XHBS- 4 Sin T 700 Es 0835 unIds 2,3  
 1258 KTC A- 2 MN(tp)1110 2110 WB AL- 2 WI 1190 0859 KUSD- 2 SD 920  
 1259 KDKA- 2 PA 1280 2111 WISCI- 3 WI 1065 1024: MUF 98.7  
 WT AL- 4 PA T1280 2112 unIds 4-6 1133 WMT - 2 IA 945  
 1325 f/outs 2129 KTC A- 2 MN 1110 1159 WSIL- 3 IL 810  
 1400 unIds 2-4 2225 XHBC- 3 BCN T1010 WTWO 2 IN 935  
 1545 WTMJ- 4 WI T1100 2229 KTL A 5 CA T1190 1227 WCIA 3 IL 935  
 1559 WB AL- 2 WI 1190 2232 KTVK 3 AZ 835 1229 WMQ- 5 IL T1045  
 WWA- 3 NC 1250 2245 KETV 6 BCN T1100 1259 WBEM- 2 IL 1045  
 WISCI- 3 WI 1065 2259 KEYT 3 CA 1270 1359 WMT - 2 IA 945  
 1622 KTC A- 2 MN 1110 2327 KVO A- 4 AZ T 750 1425 KTC A- 2 MN 1110  
 1638 WCCO- 4 MN 1110 2328 KOA I 2 AZ 855 1435 f/out  
 1707 WTWO 2 IN 935 2355 KPHO- 5 AZ 835 1650 XHBC- 3 BCN T1010  
 1710 WMT - 2 IA 945 10 Es 0005 KNXT 2 CA 1190 1659 KNXT 2 CA 1190  
 1717 WJX- 4 MI N1225 0015 KVUU 5 NV 1040 1715 KNBC 4 CA T1190  
 1759 KTVO 3 MO 835 0025 KOA I 2 AZ 855 1825-0000 2-4 unIds  
 1859 KGLO- 3 IA 985 unIds 2,5 (Spent lot of day & most  
 1931: MUF 107.9 0100 apx f/outs of eve on 50MHz, VHF contest)  
 2129 KGFE 2 ND 1240 0635 unIds 2 n.e. 13 Es 0058 KTC A- 2 MN 1110  
 CBMFT 3 MN T1410 0928 KEYT 3 CA 1270 0110 f/out  
 2135 KJJB- 4 ND T1205 1000 KTVQ 2 MT 1245 0215 unId 2  
 2140 KFYR- 5 ND T1200 1005: MUF to 95.5 0235-40 KORK-3 NV T1050  
 WD AL- 6 ND T1210 1029 KSBY- 6 CA 1335 0845 unId 2  
 2224 KTWO- 2 WY 1015 1100 unIds 2-5 0859 WBEM- 2 IL 1045  
 2318 WB AL- 2 WI 1190 1210 apx f/outs 1055 unIds 2-5  
 2332 KUTV 2 UT 1080 11 tr 0453 KPLC- 7 LA 325 KVUU 5 NV T1040  
 8 Es 1015-1200 2-3 unIds a. 0503 KXAS- 5 TX 240 1059 KORK- 3 NV 1050  
 1240 unId 5 KLTU 7 TX 280 1120 KNBC 4 CA 1190  
 1330 f/outs 0510 KRQV- 5 TX 225 KTL A 5 CA T1190  
 1729 KNXT 2 CA 1190 0959 KBIM-10 NM 440 1129 KEYT 3 CA 1270  
 1800 KNBC 4 CA T1190 Es 1055 unId 2 south 1159 KOT A- 3 SD 1040  
 1828 KDIX- 2 ND 1225 1110 XHTV 4 DF T 690 KTWO- 2 WY 1015  
 1929 KTWO- 2 WY 1015 1130 f/out 1229 KPVI 6 ID 1195  
 2015: MUF to 94.9 1235 unId 2 west 1305 KWGN 2 CO 810  
 2017 KPVI 6 ID T1195 1330 KNXT 2 CA T1190 1308: MUF 98.7  
 2059 WSJK- 2 TN 1010 KEYT 3 CA T1270 (Again, lot of time operating  
 WAE- 3 KY 945 1405 KVO A- 4 AZ T 750 50MHz for ARRL VHF contest)  
 2105 WLW-D 2 OH 1075 1429 KTVS 3 CO 815 1329 KOA- 4 CO 810  
 2115 WTVV 4 IN T 950 1500 f/outs (1350-1520: 50MHz KL7IBG  
 WTWO 2 IN 935 1700 unIds 2,3 n.e. Ketchikan, Alaska is so my  
 2118 WTVN- 6 OH N1135 1712 WMT - 2 IA 945 attention far from TV loggings)  
 2159 WCBD 2 SC 1120 1718 WB AL- 2 WI 1190 1520 KWGN 2 CO 810  
 2215 f/outs 1753 KOTA- 3 SD 1040

(13)(Es) 1758 KTWO- 2 WY 1015 2005 KDKA- 2 PA(bb)1280 (WESH-t/off so not known  
 1845 some lull 2045 WTAE- 4 PA T1280 how long Es stayed in Gulf)  
 1900 unIDs 2 2059 WJBK- 2 MI 1225 20 Es 0930 unID 2  
 2122 WBAY- 2 WI 1190 2150 WSB - 2 GA 880 0958 WESH- 2 FL 1055  
 2130 WMT - 2 IA 945 2300 unIDs 2,3 1028 WEDU 3 FL 985  
 2145 unIDs 2-6 2335 KID - 3 ID 1225 1055 f/out  
 2240 KTWO- 2 WY 1015 2355 KCPX- 4 UT T1080 1255 KNXT 2 CA 1190  
 2314 KUTV 2 UT 1080 2358 KUTV 2 UT 1080 1258 KNXT 2 CA 1190  
 KCPX- 4 UT T1080 17 Es 0000 WNGE 2 TN 820 1310 f/out  
 KSL - 5 UT T1080 WS AZ- 3 WV 1100 1536 KTWO- 2 WY 1015  
14 Es 0000-0100 2unIDs, spotty 0008 unID 4(local off but 1620 KYCU 5 WY T 875  
 tr 0402 KDFW- 4 TX 250 Id not strong enough) 1720 unID 2 Spanish?  
 ms 0404:30 WLWD- 2 OH 1075 0017 WJBK- 2 MI 1225 1815 unIDs 2,3  
 Es 0940 unIDs 2,3 ms 0044:45 WNGE 2 TN 820 1833 KID - 3 ID 1215  
 0959 KORK- 3 NV 1050 Es 0120 unID 2 briefly 1840 f/out  
 KTWO- 2 WY 1015 ms 0421:30 WREL- 3 (CBStp)830 1935 unID 3  
 1015 unIDs 4,5 1030 unIDs 2,3 2045 unIDs 2-4  
 1059 KUTV 2 UT 1080 1059 WMT - 2 IA 945 2116 WBAY- 2 WI 1190  
 KVUU 5 NV T1040 1105 WBAY- 2 WI 1190 2119 WJBK- 2 MI 1225  
 1125 KNXT 2 CA T1190 1229 KTWO- 2 WY 1015 2126 WCIA 3 IL 935  
 KNBC 4 CA T1190 1305 KNXT 2 CA 1190 2129 WISC- 3 WI 1065  
 KTLA 5 CA T1190 1329 KOAI 2 AZ 855 2220 apx f/outs  
 1259 KOAI 2 AZ 855 1312 KVO-A- 4 AZ T 750 21 tr 0859 KGHD-11 TX 340  
 1540 f/outs 1359 KCKT 2 KS T 615 KLEM-13 TX 340  
 1655 unID 2 n.w. 1413 KUSD- 2 SD 920 Es 0925 unIDs 2,3  
 1708 KVIE 6 CA T1405 1429 KNOP- 2 NE 815 0959 WJBK- 2 MI 1225  
 1736 KORK- 3 NV 1050 1458 KWGN 2 CO 810 WWJ - 4 MI 1225  
 1754 KNXT 2 CA 1190 1510 KNBC 4 CA T1190 1103 WDTN 2 OH 1075  
 1852: MUF to 106.9 1515 KVO-A- 4 AZ T 750 1108 WENN- 4 NY 1420  
 1959 KSBY- 6 CA 1335 1516 KUAT 6 AZ(tp) 750 1110 WGR - 2 NY 1420  
 2055 XETV 6 BCN T1100 1522: MUF 94.1 1128 WKZO- 3 MI 1140  
 2059 KHBC- 3 BCN T1010 1532 XETV 6 BCN 1100 1228 unIDs 2-6  
 2130-2300 2 unIDs 1558 KNXT 2 CA 1190 1555: MUF 107.7  
 (So muchin-st stetropin, had 1629 KTVK 3 AZ 835 1759 WNGE 2 TN 820  
 totell when he really did it out) 1740 KHBC- 3 BCN 1010 1824 WTVI- 4 AL T 795  
15 ms 0325 WSB - 2 GA T 880 1743 KORK- 3 NV T1050 WDIQ 2 AL 730  
 Es 2025 unID 2 vy spotty 1815 apx f/out 1829 WSB - 2 GA 880  
16 Es 0825 unID 2 18 Es 1335-1430 un.2,3Spanish 1959 KID - 3 ID 1215  
 0859 WS AZ- 3 WV 1100 1429 WJMN- 3 MI 1280 2005 KAO 4 ID T1370  
 0900 WO AZ- 4 WV T1150 1459 WBAY- 2 WI 1190 2030 apx f/out  
 0929 WPMY- 2 NC 1175 1502 KHY - 3 Yuc T 820 2125 unID 2 n.w.,briefly  
 0959 WW AZ- 3 NC 1250 1530 YSR - 2 ELSal 1200 2258 KUTV 2 UT 1080  
 1000 WSB - 2 GA 880 1705 unIDs 2-4 n.e. 2305 unIDs 2,3 spotty  
 1010 WCIV 4 SC T1120 1720 WBAY- 2 WI 1190 2330 f/out  
 WCSC- 5 SC T1120 1759 WCBD 2 SC 1120 22 ms 0355:35 WSB-2 GA 880  
 1029 WS AZ- 3 GA 1050 WCIV 4 SC T1120 Es 0950 unID 2 n.e.  
 1030 WCBD 2 SC T1120 1817 WCSC- 5 SC T1120 1020 WSB - 2 GA 880  
 1059 WESH- 2 FL 1055 1833 WJXT 4 FL T1015 1059 KTWO- 2 WY 1015  
 1115 WJXT 4 FL T1015 2000 apx f/out 1129 KUTV 2 UT 1080  
 1120 WUPT 5 FL T 975 19 Es 0650 unIDs 2,3 n.w. 1132: MUF 89.3  
 1140 WDBO- 6 FL T1035 0653 KNXT 2 CA 1190 1150 unID 2 s.,Spanish  
 1159 WEDU 3 FL 985 0715 KNBC 4 CA T1190 1215 apx f/outs  
 1205 WTVJ 4 FL T1150 0727 KWGN 2 CO(s)810 1600 YSR - 2 ELSal 1200  
 1230 KVUU 5 NV T1040 0740 KOA - 4 CO T 810 1630 f/out  
 1238 KSBY- 6 CA T1335 0759 KTWO- 2 WY 1015 1745-2015 un.2-6Spanish  
 1250 KTVK 3 AZ T 835 0800 KYCU 5 WY T 875 1848 YSR - 2 ELSal 1200  
 KHBS- 4 SIN T 700 0818: MUF 90.1 24 Es 0900 unIDs 2  
 1259 KOAI 2 AZ 855 0859 WDTN 2 OH 1075 0915 unIDs 2-4,6  
 KORK- 3 NV 1050 0929 WTWG 2 IN 935 0945: MUF 99.1  
 1335 WPBT 2 FL 1150 0945 f/out 0959 WTWG 2 IN 935  
 1410 WCIX 6 FL 1150 2000 unID 2 n.e. 1014 WJBK- 2 MI 1225  
 1419: MUF 107.1 2029 WCBD 2 SC 1120 WWJ - 4 MI T1225  
 1459 KTWO- 2 WY 1015 2035 WCIV 4 SC T1120 1029 WJIM- 6 MI 1200  
 1530 f/out WW AZ- 3 NC T1250 1059 WBBM- 2 IL 1045  
 1605 unIDs 2 Spanish 2120 unID 3 1103 WBAY- 2 WI 1190  
 1707 YSR - 2 ELSal 1200 2230 unID 3 1120 f/outs  
 1815 unIDs 2,3 2306 WESH- 2 FL 1055 ms 1312:30 KWGN 2 CO 810

## WESTERN TV-DX

August 1976

(24) Es 2058 KUTV 2 UT(bmf) T1080  
25 Es 0310 WBBM- 2 IL 1045  
 (First thought this was along  
 ms, but too slow)  
 0331 unId 2(res,patrn)  
 0415 unId 2(cub w/o Id)  
 -0429 WBAT- 2 WI 1190  
 -0855 unIDs 2-4  
 0859 WBAT- 2 WI 1190  
 WTHS- 2 FL 1150  
 0912 unId 6 Spanish  
 0959 WCBD 2 SC T1120  
 WWAT- 3 NC 1250  
 1000 WCIV 4 SC T1120  
 WCGC- 5 SC T1120  
 1040 WEDU 3 FL T 985  
 1059 WESH- 2 FL 1055  
 1125 3 Cuba  
 2 Cuba  
 WJXT 4 FL T1015  
 1127 6 Cuba  
 1244 WDIQ 2 AL 730  
 1237: MUF 99.9  
 1329 WCIA 3 IL 935  
 1358 WMJ- 4 MI T1225  
 1359 WDTN 2 OH 1075  
 WBBM- 2 IL 1045  
 1443 WCCO- 4 MN T1110  
 1459 KTC-A 2 MN 1110  
 1504 WWAT- 3 NC 1250  
 1630 f/outs  
 ms 1658:50 KCKT 2 KS 615  
 Es 2030-40 unIDs 2  
26 Es 0005 unId 2 n.w,brief  
 0635 unId 2  
 0920 KNXT 2 CA T1190  
 KNBC 4 CA T1190  
 KTLA 5 CA T1190  
 XETV 6 BCN T1100  
 0933: MUF 105.9  
 1022 WSB - 2 GA 880  
 1050 WESH- 2 FL 1055  
 1052 WJXT 4 FL T1015  
 1125 unId 6  
 1130 KOTA- 3 SD 1040  
 1131 KTWO- 2 WY 1015 26 Es 0920 unId 2 vy spotty  
 1255 unIDs 2-5  
 1430 KNXT 2 CA 1190  
 soon out  
 1655 unIDs 2 vy spotty  
 ms 1732:50 WNCE 2 TN 820  
Es 1755 unId 2,3  
 1759 KTC-A 2 MN 1110  
 WCCO- 4 MN T1110  
 1820 KSTP- 5 MN T1110  
 1950: MUF to 107.9  
 2140 KOA - 4 CO T 810  
 2148 KWGN 2 CO 810  
 2215 KTWO- 2 WY 1015 1 Es 0735 unIDs 2,3  
 2230 KID - 3 ID 1215  
 2300 apx f/out  
27 tr 0058 KFDM- 6 TX 275  
 ms 0401:25 WSB-2 GA 880  
Es 0745 unIDs 2-4  
 0959 KTWO- 2 WY 1015  
 KOTA- 3 SD 1040  
 1005 KOA - 4 CO T 810  
 1029 KWGN 2 CO 810  
 1059 KFYM- 5 ND T1200  
 1115 unIDs 2-6  
 1329 KUSD- 2 SD 920  
 1344 KTC-A 2 MN(tp) 1110  
 1428 KDIX- 2 ND 1225  
 1459 WSJK- 2 TN 1010  
 1503 WSAT- 3 WV 1100  
 WOAT- 4 WV T1150  
 1522 unIDs 2-5  
 1550: MUF to 107.9  
 1659 WTWO 2 IN 935  
 WITV 4 IN T 950  
 2200 KUTV 2 UT 1080  
 KCPX- 4 UT T1080  
 2325 WJMN- 3 MI 1280  
 2355 unIDs 2,3  
ms 1759:50 KQTV 2 MO 750  
28 Es 0000-0130 unIDs 2,3 spotty  
 0048 WBBM- 2 IL 1045  
ms 0343:25 WSB-2 GA 880 2 Es 0925 unIDs 2,3  
Es 0855 unIDs 2,3  
 0859 WATE- 3 KY 945  
 WDTN 2 OH 1075  
 0940 unIDs 2-4  
 0959 KUTV 2 UT 1080  
 1025: MUF 95.5  
 1217 WBAT- 2 WI 1190  
 1259 KDIX- 2 ND 1225  
 1329 KBCI- 2 ID 1370  
 1345 f/outs  
 1640 unIDs 2-4  
 1729 WDIQ 2 AL 730  
 1835 f/outs  
 1935-2010 uns2vy spotty  
29 ms 0338:25 WSB-2 GA 880  
Es 0925 unIDs 2-6  
 1059 KOAI 2 AZ 855  
 1115 XHTV 4 DF T 690  
 XHGC- 5 DF T 690  
 1212: MUF to 107.3  
 1334 WSB - 2 GA 880  
 1415 f/outs  
 1445-1630 uns2-5Spanish  
 1805-1835 YSR-2E1Sal1200  
 1820 2 Cuba T  
 0920 unId 2 vy spotty  
 0950 WPBT 2 FL T1150  
 1010 WTVJ 4 FL T1150  
 1029 WEDU 3 FL 985  
 1040 WDBO- 6 FL T1035  
 1044: MUF 92.3  
 1059 WESH- 2 FL 1055  
 1120 f/out  
 1235 unID 2 n.w,brief 3 Es 0850 unIDs 2,3  
 1310-1320 2 unId  
ms 1620:20 KTVI 2 MO 790  
Es 2020-2030 unId 2 east  
 tr 2330 KFDM- 6 TX 275  
1 Es 0735 unIDs 2,3  
 0758 WDTN 2 OH 1075  
 0759 WTWO 2 IN 935  
 0830 unIDs 2-6  
 0905: MUF 107.9  
 0957 WFMY- 2 NC 1175  
 0958 WCIV 4 SC T1120  
 1029 KOTA- 3 SD 1040  
 1031 KDIX- 2 ND 1225 4 Es 0850 unIDs 2  
 1058 WTAT- 4 PA T1280  
 1059 KDKA- 2 PA 1280  
 1110 WCBD 2 SC T1120  
 1210 unId 2 brief  
 1300 unId 2 brief  
 1430 unIDs 2,3  
 1459 KTC-A 2 MN 1110  
 1519 WMT - 2 IA 945  
 1543 WBAT- 2 WI 1190  
 1556 KDAL- 3 MN 1250  
 (1459 WCCO- 4 MN T1110)  
 1557 WECT 6 NC T1250  
 1558 WBTV 3 NC 1105  
 1559 KGLO- 3 IA 985  
 1629 KAM- 6 MN 1035  
 1710 unIDs 2,3  
ms 1759:50 KQTV 2 MO 750  
Es 1800 apx f/out  
 1830 WCBD 2(brief) T1120  
 1829 KNOP- 2 NE 815  
 1030 unIDs 2-5  
 1109 WCTV 6 FL 875  
 1129 WBBM- 2 IL 1045  
 1143 WCBD 2 SC T1120  
 WCIV 4 SC T1120  
 1158 KOAT 2 AZ 855  
 1159 KORK- 3 NV 1050  
 KNAT 2 CA 1190  
 1229 KTVK 3 AZ 835  
 KPHO- 5 AZ T 835  
 1238 KTLA 5 CA T1190  
 KNBC 4 CA T1190  
 1259 KEYT 3 CA 1270  
 1345: MUF 99.9  
 1405 apx f/outs  
 1628 unIDs 2,4  
 WTWO 2 IN 935  
 1640 WJHK- 2 MI 1225  
 WKZO- 3 MI T1140  
 1655 unId 6  
 1700 WBAT- 2 WI 1190  
 1723 KSTP- 5 MN T1110  
 1725 WCCO- 4 MN 1110  
 1831 KQTV 2 MT 750  
 KTVO 3 MO 835  
 1859 KLNE- 3 NE 785  
 2010 KNBC 4 CA T1190  
 2020 XHBC- 3 BCN T1010  
 2030 f/out  
 2245 unId 2 brief  
 2345-2355 KORK-3 T1050  
 0920 WTVJ 4 FL 1150  
 0928 WPBT 2 FL 1150  
 WEDU 3 FL 985  
 0955 KOA - 4 CO T 810  
 0959 KTWO- 2 WY 1015  
 1029 KWGN 2 CO 810  
 1229 WEDU 3 FL 985  
 1302 unId 6  
 1304: MUF 88.9  
 1320 f/outs  
 1500 unIDs 2 brief  
 1610-15 unId 2,4 brief  
4 Es 0850 unIDs 2

(4)(Es) 0959 WTWO 2 IN 935	1550 unId 2 Canada	1647 KORK- 3 NV 1050
WJHK- 2 MI 1225	1559 KTWO- 2 WY 1015	1653 KVUU 5 NV T1040
1012 WWJ - 4 MI T1225	1602 WCBD 2 SC 1120	1659 KOAI 2 AZ 855
1020 WJIM- 6 MI T1200	1728 WSJK- 2 TN 1010	1703 KUAT- 6 AZ T 750
1129 KGFE 2 ND 1240	1753 unIds 2-4,6	1740 KNBC 4 CA T1190
1240 unIds 2-5	1830 WDTN 2 OH 1075	KTLA 5 CA T1190
1255 MUF 88.9	1845 spx f/outs	1754: MUF 107.9
1255 WDAM 6 ND T1210	6 Es 0859 WBAM- 2(brief)1190	1815 KVOA- 4 AZ T 750
KORN- 5 SD T1055	1005-40 unIds 2,3	XEMH- 6 Son T 760
1329 WSJK- 2 TM(6n)1010	1015 KTC- 2 MN(tp)1110	1836 XHBS- 4 Sin T 700
1335 WOAM- 4 WV 1150	1040 f/outs	1844 KSBY- 6 CA 1335
1417 WNGE 2 TN 820	1115 unIds 2	(1956-58:local 5 off air but back on before my Id's)
1455 WLW-C 4 OH 1135	1129 KID - 2 ID 1215	2155 KNXT 2 CA T1190
1459 WDTN 2 OH 1075	1159 KUTV 2 UT 1080	KEYT 3 CA T1270
1538 WRTV 6 IN T 995	1207 KCPX- 4 UT T1080	2308 KOAI 2 AZ 855
1559 WCIA 3 IL 935	1250 f/outs	2335 KUTV 2 UT T1080
1705 f/outs	1350 unId 3	2338 KCPX- 4 UT T1080
1915-1945 unIds 2,3	1359 KDLO- 3 SD 1070	vy spotty to 0000
2215-2230 YSR-2E1Sal1200	1416 KGFE 2 ND 1240	
2 Es 1115 WESH- 2 FL T1200	CBWFT 3 Man T1410	7 Es 0000-0115 2 unIds
1145 WEDU 3 FL T 985	1500 unId 2 Spanish	vy spotty, on in 60-90
1217 WJXT 4 FL T1015	1530 YSR - 2 ELSal 1200	seconds at a time and
1259 WTHS- 2 FL 1150	1600 KCXT 2 KS 615	10-15 minutes between.
1300 WSAM- 3 GA T1050	(storm in this area	More Es during day but
1305 WCBD 2 SC T1120	now making it rough)	not enough time to get
1358 WESH- 2 FL 1055	1611 KLME- 3 NE T 785	it down here and mail
1429 WRBL- 3 GA 830	1634 KWGN 2 CO 810	this out

50 MHz evenings of Jun 4 & 6 had 2Es to WI area but TV so jammed full couldn't find any there. June 27 had 2Es FM to MA but TV so clogged unable to even try to tell there.

A rather productive season for the TV so far. A lot of the Ch-6 loggings were made only by audio using the SX-62 FM set up.

Also, as I use the TV VHF antenna for FM, and the set has a common input (i.e., splitter is inside set), I've been able to log a good bit of 2-4 stuff on the UHF antenna—it has been most useful on 4 as it cuts the local down. Anyway, I may try to get a separate FM antenna as the system I now use involves attaching the 300-ohm line from the SX-62 to the blades of a knife switch (with a spring "clothespin" clip)—the other end of switch is to Allied stereo set. Awkward to change in a hurry.

Still getting the weird-looking CCI on some openings out west—and still suspect it's from translators. 73, W6IYX.

This is the last Western TV-DX column from here. Next month, of course, will be under the direction of Doug Everitt. You may be asking why I am withdrawing after this many years of editing columns in the TV-FM DX hobby. I had started FM-DXing on a small scale in December 1952, and with television in January 1954, in Wasco, California. My editing began with the AIPA and the Western TV-DX column around 1960, until the club quit in 1963. I later edited an FM-DX column in the Canadian DX Club in 1966-67, soon starting with FM-DX as the WFTDA got going in 1967, changing soon to Western TV-DX as this club's organization settled down. I had hoped to get back into active DXing some day, as it had been a number of years (what with college, Navy, and apartments) since being able to do any real DXing. Now, I have my own house in Paradise, near Chico, in northern California. It is not completely clear, however, if my interest in DXing is waning. It may be possible that it is only my interest in continuing to edit a column, since the time involved is becoming more of an effort. I have no plans to drop my membership in the WFTDA at present, and it remains to be seen whether or not I will attempt to develop a DXing system here, and submit reports to columns in the VHF-UHF Digest.

In the meantime, the 10th-of-the-month deadlines for the Western TV-DX column remain, but change to Doug Everitt starting 10 August and 10 September and so on. Once again, Doug's address for Western TV-DX reports is: Doug Everitt

1708 W. Maine Avenue  
Enid, Oklahoma 73701

Below is the closing I have used since my first column in 1960 in the AIPA.

Best of DX to all

Dennis

# INTERNATIONAL NOTES from

R. R. SIMON  
523 Pilgrim Road  
West Palm Beach, Fla. 33405

Keith Hamer, who does the maps for this column, is updating his book on test cards (we call them test patterns) and is seeking photos of US, Canadian and South and Central American test patterns. Please contact him and he'll make arrangements on mailing them. His address:

7 Epping Close, Derby, DE3 4HR, England.

His first edition book is still available directly from him. It's great and worth the price. A feature by Keith on RAI, Radiotelevisione Italiana, will be in a future edition of this column.

\* \* \* \* \*

From England comes a copy of TELEVISION. It costs 40 pence an issue, and is very interesting with a TV DX column and lots of construction projects. I have written the company for information on US subscriptions. If anyone knows where they can buy this magazine in the US, please let me know.

\* \* \* \* \*

Dr. James S. Snow of Darien GA wrote to say he's been to HAITI recently, and as far as he can tell there is no on-the-air TV in the country. There appears to be wired (cable) TV with a Creole French and English channel, and a third channel is used occasionally. Service is in Port-au-Prince and in Petionville. TV antennas were noted, but as far as he could tell it was for occasional (i.e. DX) reception of Cuba, Dominican Republic, and the US.

He also noted that Radio Metropole-FM IDs in English as well as Creole French in stereo. At night it duplicates the AM outlet.

The recent VUD information on Haiti was from RICHARD CLARK who now is residing in El Paso TX. He just came back from the Dominican Republic and let me in on changes in TV, FM, and STLs. (N=new, C=change)

TV:	ch 11	Telesistema (N)	Santo Domingo	
	ch 9	Rahintel (C)	Puerto Plata	not active
FM:	89.1	R. Maiba (C)	Santiago	
	90.1	R. Guarachita (C)	Santo Domingo	STL 690 KHz
	94.3	R. Ideal (C)	Moca	STL 1230
	94.5	R. Azul (C)	Santiago	
	94.7	R. Merengue (N)	San Francisco de Macoris	
	94.9	Commercial		
		Estereo (C)	Santo Domingo	
	96.1	RTVD (C)	Santo Domingo	STL 620
	98.1	R. Universal (C)	Santo Domingo	STL 650
	98.3	La Voz del Tropical (C)	Santo Domingo	STL 790
	100.1	RTVD (C)	Santo Domingo	STL 620
	103.3	R. Norte (C)	Santiago	
	103.7	R. Popular (N)	Santo Domingo	STL 920
	105.1	R. ABC (C)	Santo Domingo	STL 540
	106.1	R. Bibin (C)	Santo Domingo	
	107.1	HIFA (C)	Santo Domingo	
HIGH-BAND &	162.0	Ondas del Yaque	Santiago	STL 930
UHF RADIO:	162.0	R. El Mundo	Santo Domingo	STL 1540
	167.0	RTVD	Santo Domingo	STL 620
	170.0	R. Exitos	Santiago	STL 1130
	459.0	R. Puerto Plata	Puerto Plata	STL 900
	459.0	B'casting Nac'l	Santo Domingo	STL 730
	460.0	R. Radio	Santo Domingo	STL 1300

(when not relaying AM it broadcasts bird calls!--for telemetry purposes?)

This updates the list in February 1976 VUD. Planned for next month is a TV program listing from EL CARIBE for June 7, 1976.

73s & GUD DXing... 

First in a Series on  
**TV SIGNAL ACCESSORIES**

**Part 1 - Baluns**

A quality TV set will produce a picture that is only as good as the quality of the signal fed to that set. This means a good antenna, quality cable, and quality distribution-system accessories. To this end, we are starting a new series of articles on TV signal distribution components, describing the components we have tested and found to be outstanding in performance and reasonably priced.

The type of balun most important to small TV distribution systems are impedance transformers designed to match a 75-ohm unbalanced load to a 300-ohm balanced source, and vice versa. The most usual applications are to match a 300-ohm antenna to coaxial cable, and to match coaxial cable to the 300-ohm input of a TV set. Baluns made for this job are shown in Fig. 1.

The SONY EAC-20W is the best all-around balun. Its VHF losses are the lowest measured, and its UHF losses are a close second. This balun is for indoor use only. Equally good VHF performance

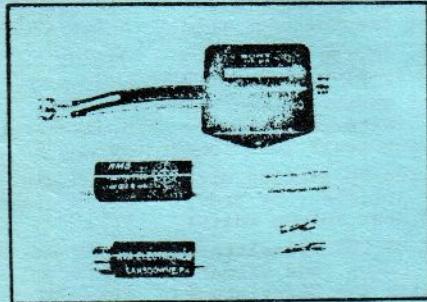


Fig. 1.

is provided by the RMS CA-2500. This balun is recommended for outdoor use, and indoor use in situations where the relative bulk of the EAC-20W is a factor. The AVA MT-1000B is a miniature balun that provides slightly better UHF performance than the EAC-20W. It is suitable for indoor or outdoor use.

The Jerrold T-383 balun and UTSH-1 mounting box (shown in Fig. 2) is useful when a small 75-ohm distribution system is to be added to a home where a 300-ohm antenna installation already exists. The 300-ohm twinlead from the antenna can be fastened to the screw terminals of the T-383, and the coax from the distribution system internally connected.

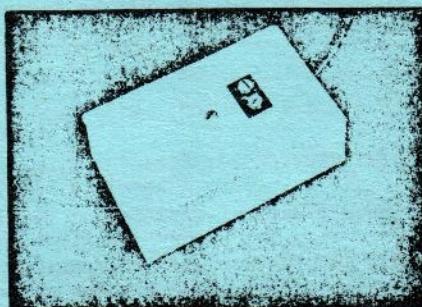


Fig. 2.

Measured insertion-loss figures for these baluns are listed below. Bear in mind though that these measurements are based on a small sampling, and unit-to-unit variations do exist.

Balun	Insertion Loss	50 MHz	200 MHz	550 MHz
Sony EAC-20W	0.35 dB	0.4 dB	0.85 dB	
RMS CA-2500	0.4	0.4	-	
AVA MT-1000B	0.6	0.7	0.8	
Jerrold T-383	0.65	0.65	0.9	

NEXT MONTH: SIGNAL SPLITTERS.

(Reprinted from Sony Technical Digest, August 1975)

**STACKING TV ANTENNAS** *continued from page 23*

tenna output to the 75-ohm coaxial cable.

If you choose to use the T-28M or some other matching transformer, correct phasing on the 300-ohm side must be observed. The easiest way to do this is to measure for continuity between the threaded (shield) portion of the coaxial connector and one conductor on the 300-ohm side. The conductor thus determined should then always be connected to a corresponding, right or left, screw terminal on each of the identical antennas for in-phase connections, or reversed for out-of-phase connections.

The effect of incorrectly phased horizontally stacked antennas is illustrated in Fig. 11.

**BEYOND DUAL OR QUAD STACKS**

Not much improvement in eliminating ghosting or man-made noise is gained by stacking more than two antennas horizontally or two vertically. If more than two in either direction seems to be required, then the advice of an experienced TV antenna installer or antenna engineer should be sought.

There are techniques other than conventional stacking that can reduce TVI. Stagger stacking, tri-stacking, and phasing harnesses can be useful, but all require a high level of knowledge and experience.

One source of such help or advice is the technical staff of an an-

tenna manufacturer such as the Winegard Company. They might have a special antenna design (called an *area special*) which will overcome the particular problems in your area and, if not, they might be willing to help you or a Winegard dealer/installer in your area "design" a special antenna array which will solve the problem. ■

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**WORLDWIDE TV-FM DX ASSOCIATION**

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ENTHUSIAST



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